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F. Thomas Juster
The Political Economy Scoreboard
Michael W. Traugott
Changes in the Makeup of the 100th Congress
Richard T. Curtin
A Discount that Consumers Couldn't Refuse
Reynolds Farley
Assessing Black Progress: Employment, Occupation, Earnings, Income, Poverty

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ECONOMIC OUTLOOK USA is designed to aid private and public decision makers in achieving a better understanding of the economic and social environment in which they will be operating. The analysis of this publication incorporates direct measurements of the expectations, attitudes and plans of both consumers and business firms with the economic and financial variables traditionally used in forecast models. The philosophy of this publication is that a blend of anticipatory and traditional measures provides richer insights into prospective developments, insights which will produce more consistently reliable forecasts of both economic and social change.

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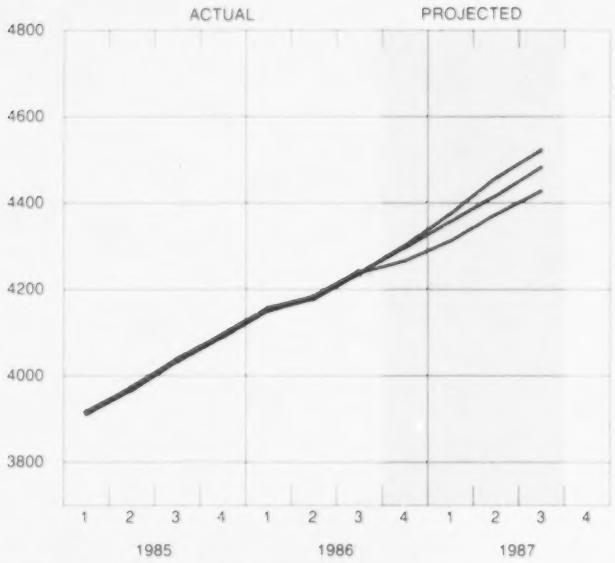

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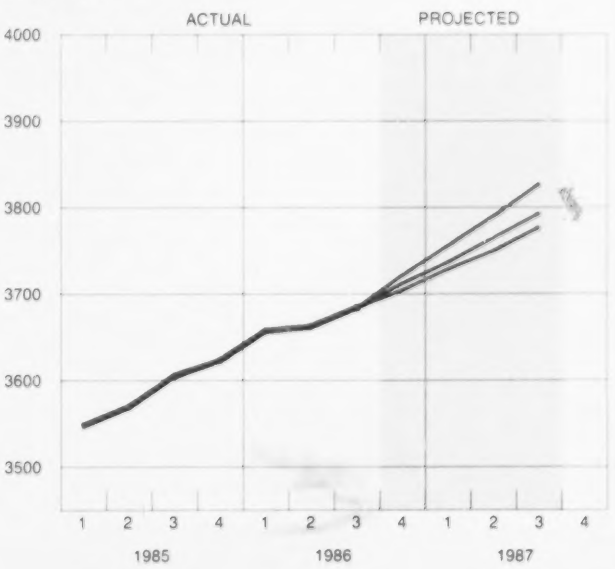

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The Political Economy Scoreboard

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Introduction

Every U.S. election brings with it a spate of assertions about economic performance—if you are defending the record, it is asserted to be good, while if you are attacking, it is asserted to be poor. During presidential election years, issues related to economic performance will often dominate political campaigns, and even during off-year contests such as the present one, the perceived success or failure of economic policy provides a backdrop of issues that have a significant influence on the election results.

Economic performance can be examined from several perspectives. If economists had sufficiently good macroeconomic models, different economic policy scenarios could be simulated and rated according to the mix of outcomes that they produced. The models would have to account for different "initial conditions"—the situation inherited by a policy-maker—as well as exogenous shocks (good or bad) that could not reasonably be debited (or credited) to policy. If everyone were in agreement on the weights that should be assigned to a set of outcomes (real growth rates, inflation rates, unemployment rates, etc.), the models could unambiguously score existing policy against the alternatives, and voters would either reward a good score or penalize a bad one.

While there are a number of quite reasonable macroeconomic models, none appears able to meet these quite rigorous demands for evaluating actual policy against alternatives. And even if they did, there is no reason to believe that voters agree on the weights to be accorded to different outcome mixes. As a substitute, we can pose two types of questions. First, forgetting about the influence on outcomes of either initial conditions (the situation inherited from the past) or luck (exogenous shocks), how do different postwar administrations compare on results? Who did best? Worst? Second, what policy outcomes do consumers (voters) appear to consider most important? And, of course, an interesting subsidiary question is whether the scoreboard on results shows the same pattern as the apparent preferences of voters.

Measurement of Results

Tables 1 and 2 display various outcomes associated with the six postwar administrations (those of Presidents Truman, Eisenhower, Kennedy-Johnson, Nixon-Ford, Carter, and Reagan). With the exception of the first and the last of these (Truman and Reagan), the measures cover the complete span of each administration. The readily available data do not extend far enough back to provide a complete record for Truman, so we consider only the 1949-53 term; and the Reagan record is still incomplete—lacking the 10 quarters still remaining in his second term.

Table 1 essentially answers the question: Ignoring initial conditions or external shocks, how well did each of these administrations do in terms of results? The top half of the table contains the measures that are naturally computed as growth rates over the time period during which each administration was in office. These are largely real growth measures—GNP, GNP per capita, etc.—except for the Consumer Price Index. The bottom half contains the measures that are best calculated as average levels over the relevant spans of time—the unemployment rate and the interest rate.

TABLE 1. Patterns of Overall Economic Outcomes Associated with Six Postwar Administrations

Indicator	Truman	Eisenhower	Kennedy-Johnson	Nixon-Ford	Carter	Reagan
Annual Growth Rates (percent change)						
Real GNP	5.7	2.0	4.7	2.3	2.9	2.5
Real GNP per Capita	4.0	0.3	3.3	1.2	1.8	1.5
Employment	2.5	0.9	1.9	1.9	2.6	1.7
Productivity[1]	3.3	1.9	3.0	1.2	0.2	1.1
Industrial Production	7.0	2.2	6.7	2.4	3.7	2.2
Consumer Price Index	2.5	1.4	2.2	6.4	10.2	4.5
Levels (average over administrations)						
Corporate AA Bond Rate (percent)	2.9	4.0	5.1	8.5	10.0	13.1
Real Interest Rate[2] (percent)	0.0	1.9	2.2	0.0	−1.6	7.0
Unemployment Rate (percent)	4.4	4.9	4.8	5.8	6.5	8.2
Index of Consumer Sentiment (points)	NA[3]	91	96	79	74	84

[1]Calculated from the series output per worker, nonfarm business sector.
[2]Calculated as the difference between the average long-term government bond rate and the annualized inflation rate (change in consumer prices) during the administration.
[3]The quarterly Index of Consumer Sentiment series began in November 1952.

TABLE 2. Patterns of Economic Outcomes Relating to Change Associated with Six Postwar Administrations

Indicator	Truman	Eisenhower	Kennedy-Johnson	Nixon-Ford	Carter	Reagan
Change from Beginning to End of Span (last 4 quarters compared to last 4 quarters of prior administration)						
Unemployment rate (percentage points)	−0.7	2.5	−2.0	4.1	−0.5	−0.1
Inflation Rate (percentage points)	−3.0	−0.2	3.3	0.4	7.5	−10.9
Corporate AA Bond Rate (basis points)	19	172	192	175	418	−244
Real Long-term Interest Rate (basis points)	320	149	−203	109	−346	947
Index of Consumer Sentiment (points)	NA	8	−1	−7	−22	30
Change during Last 4 Quarters						
Real GNP (percent)	3.7	0.7	3.6	3.8	−0.1	2.6
Unemployment Rate (percentage points)	−0.5	0.7	−0.5	−0.5	1.4	−0.1
Consumer Prices (percent)	1.5	1.4	4.6	5.1	12.6	1.7
Corporate AA Bond Rate (basis points)	−14	−42	28	−143	255	−281
Index of Consumer Sentiment (points)	NA	−4	−1	11	10	2

Table 2 contains many of the same measures, but focuses on estimates of change rather than average performance, since these might be more salient to voters. In the top half of the table, we calculate the difference between the last year of any given administration's record and the last year of the prior administration's record. For example, Table 2 shows that the unemployment rate was a bit lower at the end of the Truman administration's term than the unemployment rate inherited as an initial condition. A similar calculation of difference shows that the unemployment rate rose substantially under Eisenhower, dropped substantially under Kennedy-Johnson, rose even more substantially under Nixon-Ford, dropped slightly under Carter, and has been virtually unchanged under Reagan. This is a different perspective from that shown by the unemployment data in Table 1, where unemployment was about the same, on average, under Truman, Eisenhower, and Kennedy-Johnson, was a point or so higher under Nixon-Ford, higher still under Carter, and has been by far the highest under Reagan.

The bottom half of Table 2 is designed to focus on changes in economic outcomes that are quite close to election dates. The measures are changes during the last four quarters of each administration, and are the type of outcome measures that political scientists have tended to find useful in explaining voting behavior (see the article by Michael Traugott on page 7 of this issue). These different measures of outcomes (averages in Table 1 and several types of differences in Table 2) are displayed in Chart 1 for three of the key variables—the unemployment rate, the interest rate, and the rate of price inflation.

What Do the Measures Show?

The data in Table 1—average performance over the full span of each administration, ignoring initial conditions and good or bad luck—provide some reasonably clear generalizations but will doubtless be interpreted quite differently by partisans of the two parties. The generalization that would be most likely to find broad agreement among economists is that the 1950s and 1960s were easier periods for economic policymakers than the 1970s and the 1980s. Virtually all of the measures in Table 1 show a tendency for economic performance to deteriorate in the last three administrations (Nixon-Ford, Carter, and Reagan) compared to the first three (Truman, Eisenhower, and Kennedy-Johnson).

All the real output measures show that tendency (real GNP, real GNP per capita, productivity, and industrial production), as do prices, interest rates, and unemployment. Employment growth does not—it has no general pattern over time. Most economists would attribute this broad pattern of difference, at least in part, to adverse exogenous shocks—no one seriously believes that the productivity slowdown was induced by U.S. policy, and that plus the two oil shocks of the 1970s account for a fair part of the overall deterioration in performance.

Second, differences in average results are clearly influenced by the frequency and depth of recession periods. That is most evident in comparisons of the Eisenhower and Kennedy-Johnson records. The Eisenhower administration included two full recessions, and a third was in process in 1960 as Eisenhower's second term was ending. Kennedy-Johnson, in contrast, experienced only the end of the 1960-61 recession plus the mini-recession of 1966-67 during their term of office. Overall, the Eisenhower record shows the most recession periods of any postwar administration while Kennedy-Johnson has the fewest, and that difference shows up quite visibly in the comparisons of real growth records.

Third, there is grist for partisan mills in the performance data of Table 1. Ignoring problems of causation and interpretation, the clear winners of the scorecard displayed in Table 1 are the Truman and Kennedy-Johnson administrations. There is no clear loser among the also-rans: Eisenhower is worse than the others on output and employment growth, but better on productivity, prices, interest rates, and unemployment. Carter is better on output and employment growth, but worse on productivity, prices, and interest rates. Reagan is better than Eisenhower and Nixon-Ford on output growth but worse on productivity and unemployment, better than Carter on productivity and much better on prices but worse on output growth and employment growth. Overall, Democratic administrations do better on real growth than Republican administrations.

The records on inflation and nominal interest rates show a bit of the opposite tendency, if one takes account of the strong trends in both series and of the controls on both prices and interest rates that ended in the early 1950s. The Eisenhower record here is best, the Nixon-Ford record in reacting to the first OPEC price rise was better than the Carter record in reacting to the second OPEC episode, and the Reagan record is quite good on prices and nominal interest rates. On the other hand, the Truman and Kennedy-Johnson records are not only very strong on real growth but are also among the best, on average, for prices and interest rates.

Finally, one has to look long and hard to find any evidence of a supply-side miracle. The Reagan administration ranks fourth (out of six) on growth in real GNP and real GNP per capita, fifth on employment growth and productivity growth, is tied for sixth on industrial production growth, is fourth on inflation, and last on interest rates, real interest rates (assuming high is bad), and unemployment. To be fair, the Reagan administration inherited very high inflation rates and interest rates, and as the data in Table 2 show, ranks best on *reducing* inflation rates and (nominal) interest rates. But that can better be explained by monetary policy than by supply-side policy. And of course this does not even count the budget deficit or the trade deficit.

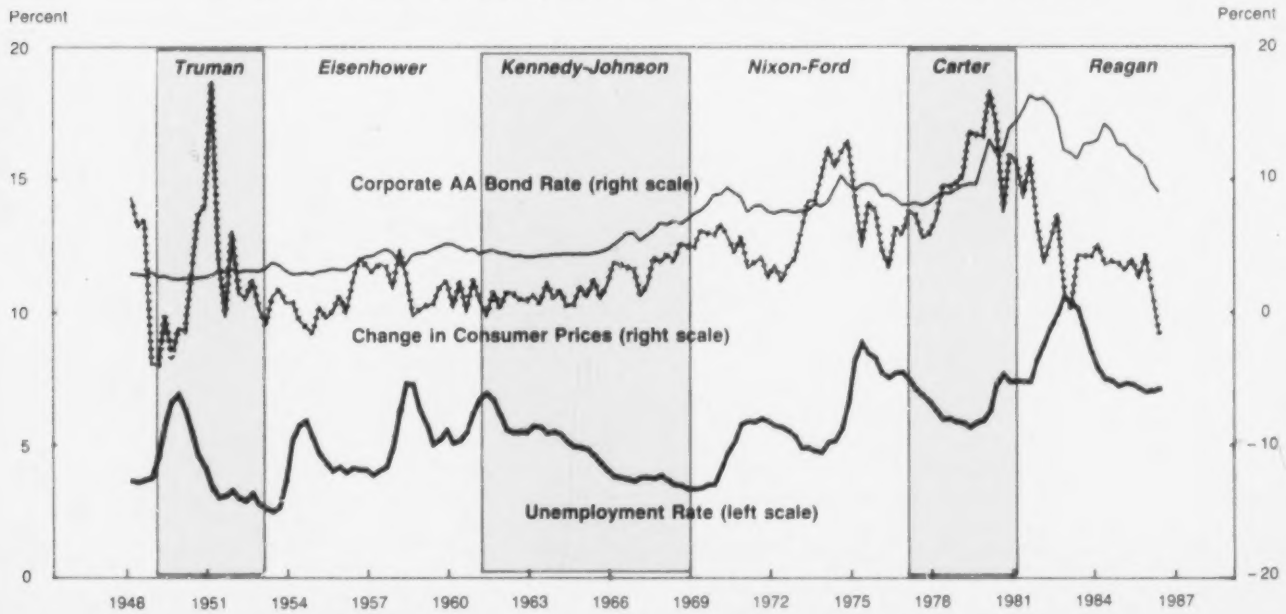
Although scorecards like Table 1 are relevant to an assessment of policy, they need to be carefully interpreted. For example, the Eisenhower administration's record does not fare too well in these data. But they bequeathed a roughly 1 percent inflation rate to the Kennedy-Johnson administration, along with a mild recession. Kennedy-Johnson produced an excellent record during the 1960s, but left a substantially higher and escalating inflation rate to Nixon-Ford (largely coming out of the Vietnam War and Johnson's refusal to finance that unpopular conflict with a tax increase). In turn, Nixon-Ford left Carter with the aftermath of the first OPEC oil shock and the severe 1974-75 recession, and Carter in turn left Reagan with very high interest rates and price inflation rates, both stemming partially from the second OPEC oil shock. And so on.

Consumer and Voter Perceptions

The data in Table 2 are designed to provide a view of policy outcomes that is focused more on performance close to an election, on the grounds that voter perceptions may be more closely related to recent outcomes than to either more distant or average outcomes. The top part of the table is responsive to the question: How have you done compared to where you started? The bottom part is responsive to the question: What have you done for me lately? The measures in this table are ones that tend to enter into public discussion of economic policy issues—"We had an inflation (growth, productivity) rate of X percent when we started, and now it's down to (up to) Y percent." Table 2 does not provide measures that compare one administration's overall score on a particular measure with the scores of prior administrations, although that comparison can easily be made by differencing the data in Table 1. No doubt voters make these types of comparisons as well, but they are not as readily calculable as the ones shown in Table 2.

The main feature of Table 2 is that it often (although not always) conveys a quite different impression of best and worst performance than the data in Table 1. For example, while the Reagan record is fourth best on the inflation rate during span of office, and worst on interest rates, it is best on *reduction* in inflation and (nominal) interest rates. And the table shows very clearly the problem that President Carter faced in the 1980 election. Not only was the inflation rate 7 percentage points higher than when he started and long-term interest rates over 400 basis points higher, but during the year prior to the election his administration was associated with a negative real growth rate, an increase of more than a point in the unemployment rate, an inflation rate of over 12 percent, and an increase in interest rates of more than 200 basis points. Other elections that clearly seemed to have turned on economic forces were those in 1960 and 1976. Economic events seemed to have been less important in 1952 and 1968.

CHART 1. Trends in Employment, Inflation, and Interest Rates, 1948-86



What Do Voters Weigh Most Heavily?

As argued elsewhere in this publication, voter perceptions of economic policy are likely to have a significant influence on the congressional election this year. What criteria do voters appear to be using in their assessment of policy?

The evidence suggests that the public is more apt to look at changes like those shown in Table 2 than at average results like those in Table 1, and that they are quite apt to evaluate economic changes in nominal terms rather than in real terms, i.e., that there is a sort of money illusion in public perceptions of policy.

The best way to show the money illusion point is to note public perceptions of interest rates. In the most recent Survey of Consumer Attitudes (summarized in the article by Richard Curtin), consumers are asked about buying conditions for houses, cars, and durable goods. Some 82 percent of consumers report that this is a good time to buy a house (close to an all-time high), and fully 78 percent say that the reason is that financing conditions are very favorable – interest rates are low and money is plentiful. In 1980, the same kind of data show exactly the opposite perception – that period was seen as a bad time to buy a house because interest rates were high and money was scarce.

The data in Table 2 (and in Chart 1) indicate the basis for these perceptions. Compared to rates prevailing when the Carter administration left office, the corporate AA bond rate was over 200 basis points lower during the past four quarters, and it has fallen by almost 300 basis points during the last year. Similar calculations for the prime rate would show even larger differences in the same direction.

But Table 2 also shows (along with Table 1) that *real* interest rates (estimated as the nominal long-term government bond rate less the inflation rate) have not declined at all but have risen to all-time highs during the last several years. Thus consumers (and voters) clearly assess the combination of a 16 percent mortgage interest rate and a 14 percent inflation rate as a high interest rate environment, while the mixture of a 10 percent mortgage rate and a 2 percent inflation rate is seen as a low interest rate environment. Yet one computes to a 2 percent real interest rate, the other to an 8 percent real interest rate. But what clearly matters to consumers is that nominal rates have declined from 16 percent to 10 percent, not that the real rate calculation shows a rise from 2 percent to 8 percent.

Other data provide additional evidence that inflation rates and interest rates enter strongly into consumer and voter preference functions, quite independently of whatever is happening to other economic outcomes. Responses to an economic policy question (In terms of policies to combat inflation and recession, is the administration doing a good job, a fair job, a poor job, or what?) show relatively high ratings for current administration policy, and that judgment must be based on the current mix of low inflation rates, low growth rates, low (in comparison to the early 1980s) nominal interest rates, and high real interest rates. And throughout the 1970s, changes in the rate of price inflation dominated consumer perceptions of economic conditions, often independently of the movement of real variables. The best summary measure of this phenomenon is the change in the Index of Consumer Sentiment during the Carter and Reagan administrations – high and rising rates of price inflation and nominal interest rates showed up as a 22 point drop in the ICS during the Carter years, while declining inflation rates and nominal interest rates showed up as a 30 point rise in the ICS under Reagan.

As a broad generalization, the data are consistent with the notion that when financial variables (prices and interest rates) are relatively well behaved and show only moderate swings, real variables (output growth, employment and unemployment) determine consumer and voter perceptions of policy success or failure. But when monetary variables (inflation rates, nominal interest rates) show wide swings, their movements will tend to dominate judgments about policy success or failure.

Moreover, the data support the inference that consumers have a strong preference for a low inflation rate and low nominal interest rate environment, given the same real environment; that is, consumers strongly prefer the combination of 2 percent money income growth and zero inflation to 12 percent money income growth and 10 percent inflation, even though both provide 2 percent real income growth; and consumers would very likely prefer the combination of zero money income growth and zero inflation, thus no real growth, to combinations of high money income growth and high inflation rates that yield positive real growth rates.

What accounts for this preference pattern? Probably three factors. First, consumers have always seen nominal changes in money income as related to their own efforts as workers – a 10 percent pay increase is a reward for hard work – while seeing price inflation as an injury done to them by others. Thus the combination of 10 percent money income increase and 8 percent inflation is seen as an unfair erosion of the gains from hard work, and is judged negatively.

Second, high inflation rates create a good deal of uncertainty. While the *average* consumer gains if *average* income growth rates are 10 percent and *average* price increases are 8 percent, quite a few consumers will lose, and many more will be fearful that they might lose. The distribution of real income change probably has more variability when it comes from a (+10, +8) combination of income change and price change than when it comes from a (+2, 0) combination. In short, consumers don't like uncertainty.

Third, consumers tend to judge high rates of price inflation, and high nominal interest rates, as a forecast of future economic difficulties – as indeed they should given the U.S. economic policy-making process. In addition, consumers seem to characterize a high interest rate/high inflation environment as one in which policy-makers have lost control, and are unable to manage the system effectively.

Are these preferences for well-behaved nominal values a stable feature of the economic landscape? Probably but not necessarily. The aversion to high inflation rates and high nominal interest rates may be a simple consequence of the fact that these environments have been associated with the poor real economic performance of the 1970s and the early 1980s. If low inflation and low nominal interest rates do not produce better performance during the rest of the 1980s, those judgments could change. After all, history does not always support the inference that low inflation rates and nominal interest rates are a winning combination – the depression of the 1930s was characterized by precisely that combination!

October 1986

Changes in the Makeup of the 100th Congress

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The early betting is that the Democrats will increase their margin of control in the U.S. House of Representatives this November, but by a historically few seats. The control of the Senate is in doubt and may stay with the Republicans. For each chamber, however, the results will depend heavily upon popular evaluations of President Ronald Reagan and the performance of the national economy in recent months.

The analysis of midterm congressional elections has received a great deal of attention from political scientists. Several models have been developed to predict the aggregate number of House seats that would be gained or lost by the two parties, based on the president's popularity and the performance of the national economy. Such models have been reasonably successful, even though they ignore explicit measures of candidate characteristics, campaign spending, and the like. But races for the U.S. Senate are much more individualized events, subject to more substantial candidate-related effects and the influences of increasingly heavy campaign expenditures. That is why we can speak with some confidence of probable gains and losses in the lower chamber, but assessing Senate outcomes is much more risky and needs to be done almost on a case-by-case basis.

The Basics of Congressional Elections

In order to appreciate the difference between predicting the outcomes of House and Senate elections, it is important to keep in mind the fundamental differences in the seats which are at stake. The term of a U.S. Representative is two years, and every one of the 435 members is elected at the same time. Each state has two Senators who serve a six-year term, and only one-third of the chamber is elected every two years.

While every congressional district is of essentially equal size – or something very close to it immediately after the redistricting which occurs following a decennial census – the range in the size of Senate constituencies is as great as the population of the states themselves. For the House this means about 500,000 people in a district, but for the Senate the range is from about 502,000 citizens in Alaska to 25,622,000 in California. For any given election, the 33 or 34 Senate seats at stake have widely different political characteristics and varied candidate pairings, campaign strategies, and resources.

Finally, House incumbents have substantially greater probabilities of being reelected than Senate incumbents. This is in part due to the difficulty faced by House challengers in developing name recognition in their districts. In Senate races, intensive media use can create extensive recognition among the public of a challenger's name, record, and stance on public issues. That costs money, of course, but a challenger with reasonable prospects of winning can often raise the necessary funds. In House races, on the other hand, narrow geographic boundaries make intensive media use uneconomical, the relevant constituency is moderately small in size, and the constitutents have been kept informed of the incumbent's activities and record by the free distribution of information during the incumbent's term. In any event, the record is clear. In excess of 90 percent of House incumbents typically will win if they seek reelection, while Senate incumbents have a much more checkered record of success.

Campaign expenditures are an important ingredient of congressional races and have become increasingly important during recent years. Detailed data on campaign receipts and expenditures have only been available since 1974, when candidates for federal office were required to disclose most of their receipts and expenditures. As the data in Table 1 show, the average cost of a congressional campaign increased about fourfold between 1974 and 1984; even allowing for inflation, the cost more than doubled. The average cost of a winning House campaign in the 1983-84 cycle was more than $200,000, and the amount increased in relation to the closeness of the vote.

The biggest spender in the 1984 House election was Andrew Stein, a challenger in New York's Fifteenth District, who reported $1,779,281 in expenses. Candidates in open races spent more on average than incumbents. Spending by losing challengers was consistently lower, and expenditures decreased sharply as competition did. These levels of campaign spending in House races can be explained by the candidates' perceptions of their chances as well as their status. Incumbents can raise as much money as they need, in response to the seriousness of the challenge they face. Challengers can raise money if it is widely perceived that they have a chance to win; otherwise their fund-raising prospects are dim. And candidates in open races – where no incumbent is running – will generally expend the largest sums (Goldenberg and Traugott, 1984).

Across the same thirty-year period, the success rate of Senate incumbents seeking reelection dropped steadily, bottoming out in 1980 at 55 percent. In that election, a relatively large class of freshmen Republicans was elected on Ronald Reagan's coattails; and they are the cohort standing for reelection this year. The net Republican gain of 12 seats in that election was achieved with the defeat of nine Democratic incumbents and the capture of all three open seats.

Since 1980, the reelection success rate for Senate incumbents has jumped back up to levels associated with the House. This has been as much a function of the specific candidates seeking reelection as of their campaign strategies. And ever greater amounts of money are being spent by opposing candidates in these races.

These statewide races are more expensive to run because television becomes more cost-effective, staffs are larger and more professional, and travel increases. A typical Senate race involves a budget of more than one million dollars, and in large states the cost is considerably greater. Phil Gramm ran in an open contest in Texas in 1984, and he spent more than $9.5 million dollars; his Democratic opponent Lloyd Dogget spent $5.9 million. The leading spenders last time, however, were in the North Carolina race where incumbent Republican Jesse Helms spent almost $16.5 million, and his Democratic opponent Jim Hunt trailed with $9.5 million.

The relative value of these dollars can be linked to levels of candidate recognition in each of these types of races and then to success at the ballot box. In House races, where ex-

TABLE 1. Expenditures in U.S. House Campaigns, 1974-1984

Candidate Classification	1974	1976	1978	1980	1982	1984
All Candidates						
Total Expenditures	$44,051,125	$60,046,006	$86,129,169	$115,222,222	$174,921,844	$177,411,116
Mean Expenditures	53,384	73,316	109,440	153,221	228,060	217,416
	n = 810	n = 819	n = 787	n = 752	n = 767	n = 816
Mean, Democrats	53,993	74,563	108,986	143,277	213,369	219,575
	n = 434	n = 429	n = 416	n = 396	n = 411	n = 434
Mean, Republicans	54,835	71,945	109,995	164,282	245,020	214,962
	n = 376	n = 390	n = 371	n = 356	n = 356	n = 382
Incumbents						
Mean, all incumbents	56,539	79,398	111,159	165,081	265,001	276,851
	n = 382	n = 382	n = 377	n = 391	n = 383	n = 412
Mean, Democrats	38,743	73,322	103,519	158,010	247,573	275,698
	n = 218	n = 254	n = 249	n = 248	n = 216	n = 258
Mean, Republicans	80,339	91,456	126,022	177,345	287,543	278,781
	n = 163	n = 128	n = 128	n = 143	n = 167	n = 154
Challengers						
Mean, all challengers	40,015	50,795	74,802	121,751	151,717	126,671
	n = 323	n = 335	n = 299	n = 277	n = 270	n = 356
Mean, Democrats	59,266	46,330	70,948	93,313	141,390	102,230
	n = 162	n = 122	n = 109	n = 105	n = 137	n = 152
Mean, Republicans	20,644	53,352	77,012	139,111	162,354	144,882
	n = 161	n = 213	n = 190	n = 172	n = 133	n = 204
Open Seats						
Mean, all open-seat candidates	90,426	124,506	201,049	201,790	284,476	380,285
	n = 106	n = 102	n = 111	n = 84	n = 114	n = 48
Mean, Democrats	99,743	145,497	211,871	180,312	256,004	359,439
	n = 54	n = 53	n = 58	n = 43	n = 58	n = 24
Mean, Republicans	80,751	101,802	189,205	224,116	314,547	401,130
	n = 52	n = 49	n = 53	n = 41	n = 56	n = 24

penditures are generally lower, the candidates are less visible, especially the challengers. As a result, voting tends to be much more along party lines with the clear preponderance of defections going to the incumbent.

Most of the additional expenditures in statewide senatorial races goes to television advertising and other kinds of mediated contact with voters. By the end of the campaign both of the candidates are generally well known, and the voters can make relative evaluations of them. This process makes party voting less stable, and the defections do not necessarily favor an incumbent seeking reelection.

Models of Midterm House Election Outcomes

Because every House seat is at stake during each election, the research emphasis has been upon forecasting these outcomes rather than those in Senate races. And the effort has concentrated upon explaining the almost inevitable loss of seats by the incumbent president's party. In these 31 so-called "midterm" elections since the Civil War, the president's party has lost House seats in all but two. One instance was during the Depression (1934), and the other was something of an anomaly involving redistricting after the 1900 census when the number of representatives was increased. In only four other elections have the House losses been in the single digits, and they reached 116 in the election of 1894[1] (see Chart 1).

The models of seat losses generally employ a concept of aggregated behavior or response which is only partially supported by studies of individual voters conducted at the Center for Political Studies. The basic underlying concept is that of a referendum on the incumbent president, and the magnitude of the loss is linked to general evaluations of the president's performance in office and the voters' satisfaction with their economic well being – or changes in it – in the intervening two years since the president was elected.

The basic characterization of the individual forces at work comes from Angus Campbell's analysis of the "surge and decline" in participation levels from on-year to off-year elections. There are fundamental differences in the electorate that participates when the stimulus of a presidential campaign highlights an election and when it does not. Of particular significance is the fact that turnout declines substantially in the off year, and there is an associated decline in the vote share received by the president's party for its House candidates.

[1]In contrast, the president's party lost Senate seats in 18 of these midterm elections and gained them in 13, an inherently more difficult phenomenon to deal with, especially taking the variations in constituencies into account.

This is due primarily to the loss of marginal participants – or peripheral voters – from the on year to the off. The result is that partisanship has a more significant role to play in the absence of coattails, which disproportionately affect those who are weakly identified with one of the parties or call themselves "independents," and because those who persist in voting are likely to be stronger partisans to begin with.

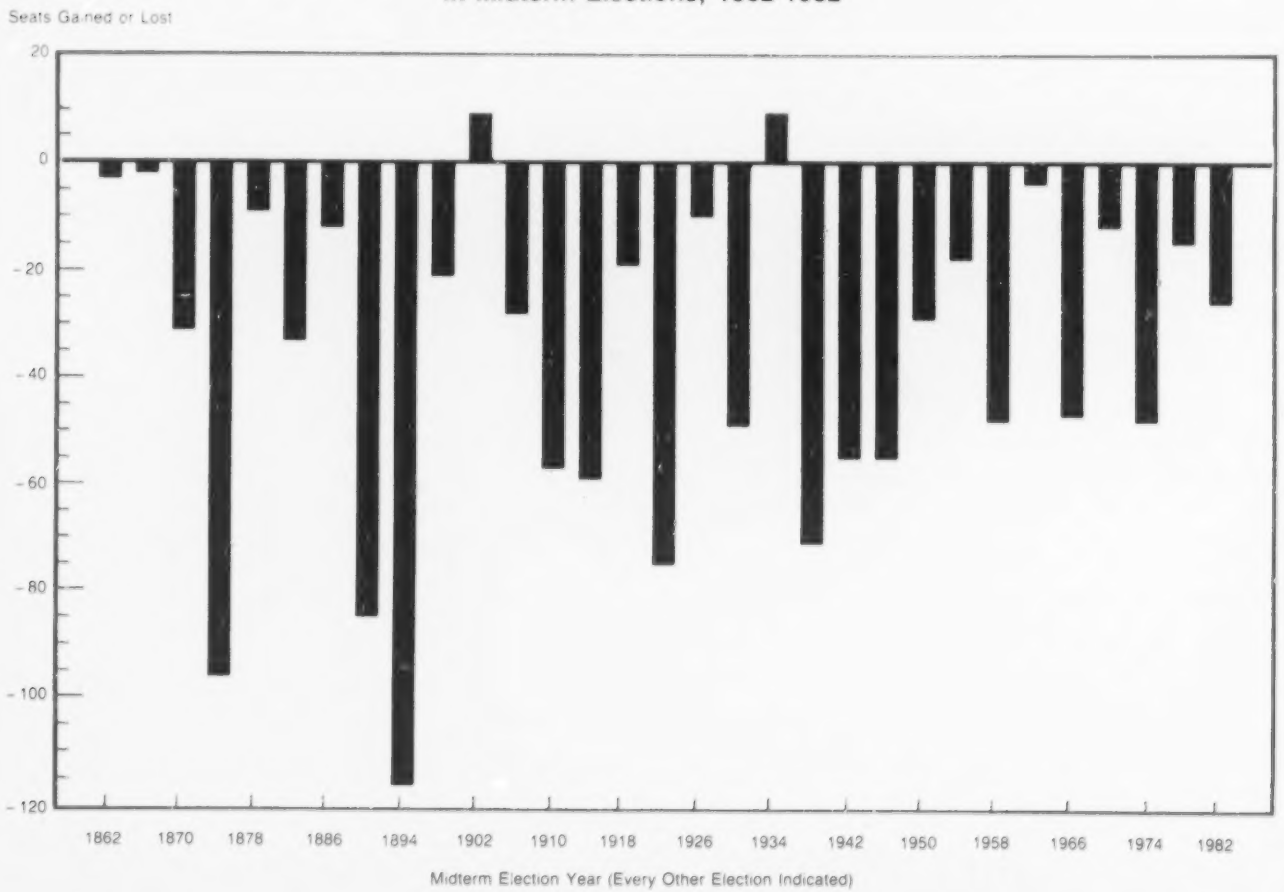
This model is based upon an underlying assumption of the strength and stability of partisanship, and this can explain the direction of the losses. But the models which have been developed from this set of observations incorporate additional conceptual elements to explain the magnitude of the losses. In the original work by Tufte (1975), a measure of national evaluations of the president – his approval rating in the Gallup Poll at the time of the election – was used in conjunction with an indicator of the performance of the national economy. At that time, the empirically-determined indicator selected was the change in real disposable income per capita in the year preceding the election. In the Tufte model, a simple formula is used to estimate the vote loss for the president's party, which is then translated into a seat loss. Because the model incorporates a survey measure, it could only be applied to post-World War Two elections, when such data became available.

This basic model has since been modified on a number of counts. One conceptual shift has been in the direction of adding elements which incorporate the strategic behavior of political elites such as candidates, party activists, and contributors (Jacobson and Kernell, 1982). This model suggests that some classes of candidates may be stronger than others because of perceptions that the president and his party are vulnerable. This will result in stronger candidates running in opposition with more money being made available to them, and it may have an effect on inducing older or more vulnerable incumbents from the president's party to retire. While this may reflect the real world of campaign politics more accurately, these elements have resisted easy quantification.

A second set of changes have been directed toward finding measures which are available sufficiently in advance of the election to permit forecasting rather than *ex post facto* estimation. Lewis-Beck and Rice have substituted the quarterly growth rate in real GNP per capita and the presidential popularity rating measured six months before the election, and they use their equation to predict the outcome of on-year congressional elections as well. Their median absolute error in the 17 congressional elections between 1950 and 1982 was about 5 seats (a mean of 7.9 seats), and their model has been very successful in predicting whether the losses for the president's party would be substantial or not.

The Lewis-Beck and Rice model suggests that in 1986 the Republican party will suffer a much smaller than average

CHART 1. The President's Party's Gains and Losses of House Seats in Midterm Elections, 1862-1982



midterm loss of only six seats. As the data in Chart 2 show, this would be the second lowest total since World War II, rivaled only by a four seat loss suffered by the Democrats under John Kennedy in 1962.

By the underlying theory and the statistical parameters of the model, this would be attributable to the historically high level of approval which Ronald Reagan is enjoying as a president in his sixth year of service. In the May Gallup Poll (six months prior to the election) it stood at 68 percent. It has increased more recently to as high as 73 percent.

Predicting the Outcomes of the Senatorial Races

Predictions are much more difficult to make for the net outcome of the Senate races because of higher levels of competition between more equally matched opponents. There is an unusually large number of Republican-held seats at stake, 22 out of the 34 being contested. Many analysts feel that the Republicans face unusual vulnerability due to this factor alone. There are 18 seats in which a Republican is seeking reelection, but only nine involving a Democrat, and there are seven open seats.

In these races it will eventually be possible to predict winners of individual races with some confidence as election day nears. While it would then be possible to add up the individual estimates to an aggregate seat gain or loss, at this writing it is too early to make all of these picks with confidence.

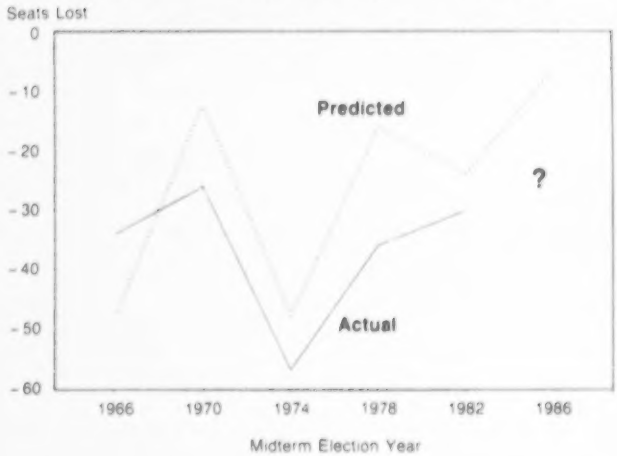
In one published analysis (Boyd, 1986), the races have been divided into 17 "safe" contests and an equal number which are in doubt. Among the safe races, the Republicans are expected to win 10 and the Democrats seven. Among the 17 "contested" races, the guessing is that the Republicans and Democrats will each win six. Of the remaining five races, three are currently held by Republicans and two by Democrats.

When all of these projected outcomes are combined with a Democratic advantage of 35 to 31 among the seats which are *not* at stake, they suggest that the 100th Senate will be divided equally among Democratic and Republican members. If that turns out to be the case, then Vice-president George Bush will lose a lot of campaigning time in the next two years because he will be in Washington ready to cast tie-breaking votes.

Conclusion

The 1986 election is an important one for both political parties. Ronald Reagan has been campaigning actively on behalf of Republican candidates for months. These visits serve two purposes: they help Republican candidates to raise money, and they provide an opportunity to link them to a popular president. This should serve the party well in November and keep its losses to historically low levels.

CHART 2. Actual and Expected Seat Losses in Midterm Elections Predicted by Lewis-Beck and Rice, 1966 to 1986



There are larger issues at stake in this election, however. The Republican Party is trying to institutionalize Reagan's personal appeal by 1988; and in this last midterm election over which he will preside in office, they are trying to make permanent converts of as many independents and weak Democrats as possible. Their goal is to secure the electoral safety of future generations of Republican candidates who would benefit from such a political realignment.

October 1986

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A Discount that Consumers Couldn't Refuse

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Confidence Maintained Amid Offsetting Trends

In the third quarter 1986 survey, the Index of Consumer Sentiment was 94.8, insignificantly different from the 96.8 recorded one quarter earlier and the 94.3 recorded one year earlier. Since the spring of 1983, the Index has remained in the relatively narrow range of 91.1 to 99.5, and has averaged 94.6 – a level nearly identical with the current reading. This represents the longest sustained period of consumer confidence recorded since the mid-1960s. In sharp contrast, during the prior three year period, from 1980 to 1983, the Index averaged just 68.3. Over the past quarter century, the Index has averaged 85.0, ranging from a high of 103.4 (1966) to a low of 54.4 (1980).

The continued maintenance of sentiment at high levels, however, has been due to offsetting trends. As the expansion period has lengthened, expectations for improvement in the economy have dwindled, but have been offset by continued gains in personal finances and buying conditions. While future income and employment prospects have dimmed, the recent declines in inflation and interest rates have brightened evaluations of current economic conditions. From the start of 1986 to the end of June, the net change in the CPI was nearly zero, and through the first nine months of 1986, price increases have remained under 1%. This virtual absence of inflation has had an important impact on the personal financial situation of families. More importantly, sharply discounted interest rates have promoted very favorable buying attitudes.

Interest Rate Reductions Attract Buyers

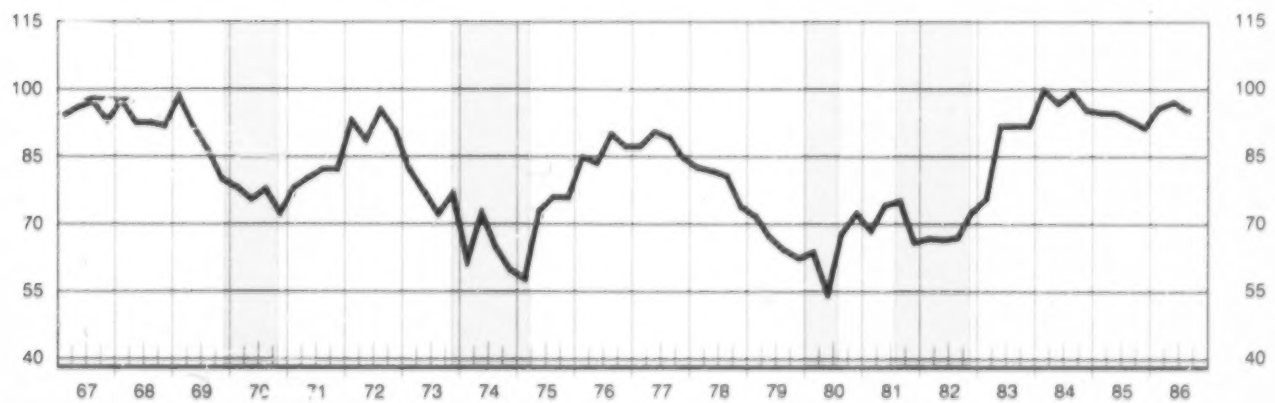
Vehicles. Favorable attitudes toward buying conditions for vehicles were held by more families in the third quarter of 1986 than at any other time in the history of these surveys – by 76 percent of all families. Each of the three quarterly surveys conducted thus far in 1986 has, in turn, set new record levels; the total increase over prior peaks, however, has been small – just 4 percentage points. The most frequently cited reason for these very favorable attitudes has been the interest rate reductions offered by vehicle manufacturers. In the third quarter 1986 survey, 59 percent of all families cited reduced interest rates, up from 39 percent one year earlier. In addition, consumers continue to hold positive views of market prices for new vehicles. Twice as many consumers reported the availability of price discounts than complained about high prices (24 versus 12 percent) in both the second and third quarter 1986 surveys. While reports of the availability of price discounts have been more frequent in the recent past, not since the mid-1960s have complaints about high prices been as low.

The appeal of interest rate discounts has been amply demonstrated in recent months. Sales of new cars and light trucks in the third quarter of 1986 reached a seasonally adjusted annual rate of just over 18 million units, the highest quarterly sales rate on record (see Table 1). This selling rate was significantly higher than the prior peak of 17.0 million units recorded in the third quarter of 1985, which was also prompted by interest rate discounts. But like last year, when the discount programs end, sales can be expected to decline sharply. At annual rates, vehicle sales declined by 2 million units from the third to the fourth quarter of 1985. This decline in sales was countered by the introduction of new incentive programs by year-end 1985. And the renewal of incentive programs can again be expected during the year ahead.

Each new round of incentive programs has been based on progressively lower interest rates – falling from 12% to under 3% over the length of the current economic expansion. This progression toward lower interest rates has now been largely exhausted, although longer maturity loans at these lower in-

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

TABLE 1. Vehicle and Home Sales, Changes in Personal Consumption and Disposable Income, and Personal Saving Rate

Year	Vehicles[1]			Homes[1]			Change in Personal Consumption[2]	Change in Personal Disposable Income[2]	Personal Saving Rate
	Cars	Trucks	Total	New	Existing	Total			
1971	10.2	1.8	12.0	0.7	2.0	2.7	3.1	3.6	8.5%
1972	10.9	2.2	13.1	0.7	2.3	3.0	5.4	4.0	7.3
1973	11.4	2.7	14.1	0.6	2.4	3.0	4.2	6.6	9.4
1974	8.8	2.3	11.1	0.5	2.3	2.8	−0.9	−1.0	9.3
1975	8.5	2.2	10.7	0.5	2.5	3.0	2.3	1.9	9.2
1976	10.0	2.9	12.9	0.7	3.0	3.7	5.4	3.6	7.7
1977	11.1	3.3	14.4	0.8	3.7	4.5	4.4	3.3	6.6
1978	11.2	3.7	14.9	0.8	4.0	4.8	4.1	4.9	7.1
1979	10.6	3.1	13.7	0.7	3.8	4.5	2.2	2.1	6.8
1980	9.0	2.2	11.2	0.5	3.0	3.5	−0.2	0.1	7.1
1981	8.5	2.1	10.6	0.5	2.4	2.9	1.2	1.6	7.5
1982	8.0	2.4	10.4	0.4	2.0	2.4	1.3	0.6	6.8
1983	9.2	2.9	12.1	0.6	2.7	3.3	4.7	3.1	5.4
1984	10.4	3.8	14.2	0.6	2.9	3.5	4.7	6.0	6.3
1985	11.0	4.4	15.4	0.7	3.2	3.9	3.5	2.3	5.1
1986:1	10.7	4.1	14.8	0.8	3.3	4.1	3.6	6.5	5.0
1986:2	11.2	4.5	15.7	0.8	3.5	4.3	6.2	7.1	5.1
1986:3	13.2	5.2	18.3	0.6[3]	3.6[3]	4.2[3]	7.2	−2.2	2.9

[1]Millions of units sold.
[2]Percentage changes, 1982 dollars.
[3]Includes data for July and August only.

terest rates could further stimulate sales. Even though these incentive programs have proved to be an expensive means to promote sales, consumer reactions are likely to insure their continued availability. Consumers have now come to expect sellers to offer discounts, and to time their purchases to their availability. The withdrawal of discount programs is now met with sharp declines in sales, both because consumers have sped up purchases to take advantage of discounts, and because consumers are more willing to postpone purchases as they expect renewed discounting in the future.

Homes. Favorable attitudes toward buying conditions for homes were held by 82 percent of all families in the third quarter 1986 survey, just below the all-time record of 85 percent recorded one quarter earlier. The very small recent decline was due to fewer mentions of reduced mortgage interest rates—falling to 78 from 82 percent. Nonetheless, perceptions of mortgage interest rates remain much more favorable than one or two years earlier, and are the dominant factor behind favorable home buying attitudes. Although perceptions of home prices remained on balance favorable in the most recent survey, they were not as favorable as one year earlier. Among families with incomes of $30,000 or more, favorable references to current home prices fell from 30 to 24 percent during the past year.

These very favorable home buying attitudes have been reflected in sales. Single family homes were purchased at an annual rate of 4.3 million units in the second quarter of 1986, up from 3.7 million units in the comparable period one year earlier. Most of the improvement during the past year has been in purchases of existing homes, rather than those newly built. Although the current sales rate is well below the peak year of 1978—when 4.8 million homes were purchased—it represents the best performance thus far in the 1980s.

Household durables. Favorable attitudes toward buying conditions for household durables remained at the all-time record level in the third quarter 1986 survey. In each of the last three quarterly surveys, 77 percent of all families held favorable views of buying conditions for large household durables. These very favorable buying attitudes were based more frequently on the availability of price discounts (37 percent) than on lower interest rates (27 percent). Although fewer consumers mentioned price discounts in the third quarter 1986 survey than a year earlier, many more mentioned lower interest rates on these purchases. Among families with incomes of $30,000 or more, the shift was particularly sharp: from the start of 1985 to the third quarter of 1986, reports of price discounts fell from 50 to 37 percent, while reports of lower interest rates rose from 14 to 35 percent. Although favorable attitudes toward buying conditions for household durables were propelled toward record levels by price discounts, the maintenance of these favorable attitudes at record levels has become increasingly dependent on reductions in interest rates.

Total consumption spending has risen significantly since the start of 1986. In the third quarter, total consumption spending increased by 7.2%, twice the quarterly growth rate recorded at the start of the year. Thus far in 1986 growth in spending has averaged 5.7%, substantially above the 1985 increase of 3.5% (see Table 1). Because income has not grown as fast as consumption, the rate of saving has fallen significantly. Thus far in 1986 the quarterly growth rate in personal disposable income has averaged 3.8%, compared with a 5.7% average growth rate in spending. As a result, the saving rate in the third quarter of 1986 reached the record low level of 2.9% (Table 1).

Personal Finances

The financial situation of American families has remained largely unchanged, at favorable levels, throughout the past three years. More families reported that their personal financial situation had improved in the third quarter 1986 survey than at anytime since the early 1970s. Among all families,

47 percent reported that their financial situation had improved, compared with 24 percent that reported that their financial situation had worsened during the past year. This represents a modest improvement over the year earlier, but is only marginally above the two year earlier reading (45 versus 23 percent). The recent increase in favorable evaluations was based on more frequent income increases and, more importantly, on lower rates of inflation. Among all families in the third quarter 1986 survey, 35 percent reported increases in family income during the past year, above the 32 percent recorded one year earlier. Complaints about the erosion of purchasing power due to inflation were reported by just 11 percent of all families, the lowest proportion recorded since the mid-1960s.

An improved financial situation during the year ahead was expected by 38 percent of all families in the third quarter 1986 survey, just above the 35 percent recorded one year earlier and the 37 percent recorded two years earlier. Nearly half (49 percent) of all families in the third quarter survey expected their financial situation to remain unchanged during the year ahead, as has been true for most of the past two years. Importantly, just 10 percent of all families in the third quarter survey expected their financial situation to worsen, again largely unchanged during the past two years.

Although families somewhat more frequently expected income increases in the third quarter of 1986 than one year earlier (62 versus 56 percent), the size of the expected annual increase has declined. Among all families, the median income increase expected was 3.5%, barely above the median expected annual rate of inflation of 3.0%. Given that consumers expected only a 0.5% improvement in real income, it is no surprise that so many thought that their overall financial situation would remain unchanged during the year ahead. This cautious outlook for personal finances, while not negative and thus a reason for retrenchment of spending plans, does place greater emphasis on the affordability of purchases, and thus on the availability of discounts on prices and interest rates.

Slow Economic Growth Expected to Persist

Fewer families reported hearing of recent favorable developments in the economy in the third quarter 1986 survey than at mid-year (33, down from 46 percent). The proportion of families that thought the economy in general had improved during the past year fell to 49 percent in the third quarter from 58 percent one quarter earlier. Unemployment continued to be the major concern voiced by consumers. Among all families in the third quarter 1986 survey, just 13 percent expected declines in the national unemployment rate during the year ahead, the most bleak outlook in more than three years. Although few consumers expected any further reductions in the unemployment rate, rather than increase, the majority expected the national unemployment rate to remain unchanged at its current level during the year ahead (55 percent in the third quarter 1986 survey).

Favorable prospects for economic growth reached peak levels in mid-1983, and subsequently declined at a rapid pace through mid-1985. Since mid-1985, however, only minor further declines have been recorded. In each of the last five quarterly surveys, 57 percent of all families expected the performance of the national economy to remain similar to the prior year's. Many fewer consumers expected business conditions to either improve (24 percent) or worsen (16 percent) during the year ahead. Even though only slow economic growth was expected, prospects for the national economy during the year ahead were nonetheless viewed favorably. Among all families in the third quarter 1986 survey, 55 percent expected good times financially in the economy as a whole, unchanged from one year earlier.

While consumers do not expect the onset of a recession during the year ahead, they do expect that a recession will occur sometime during the next five years or so. When asked in the third quarter survey about prospects for the economy as a whole during the next five years, more families expected a recession than a continuous expansion by the margin of 46 to 37 percent.

Summary Outlook

Price and interest rate reductions have been responsible for the current extended period of consumer confidence. The response of consumers to the recent interest rate discounts on new vehicle purchases not only attests to their continued willingness to make major purchases, but also to their willingness to commit future income to the repayment of debt. This sense of confidence, however, is limited to the maintenance of the status quo, rather than the expectation of better times to come. Few consumers expect the economic situation to improve during the year ahead, either for themselves or for the country as a whole. Neither do they expect the economic situation to worsen. Most consumers expect an unchanged overall economic situation during the year ahead. And given the length of the current expansion, most consumers have judged this to mean the continuation of good times financially.

Given these prospects, and the record debt levels needed to finance the surge in third quarter sales, consumers will be more cautious in their spending plans, but without an overall retrenchment. With debt-burdened family budgets, judgments about the affordability of purchases will increasingly focus attention on the availability and size of discounts on prices and interest rates. And consumers' willingness to time their purchases according to the available discounts will continue to shape aggregate trends. Consumers now expect both the repeated use of discounts by sellers to stimulate sluggish sales, and an economic environment where such slowdowns in sales can be expected. *October 1986.*

Assessing Black Progress: Employment, Occupation, Earnings, Income, Poverty*

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Trends in Employment, Occupations, and Earnings

We would expect that racial differences in economic indicators would contract in the post-World War II years. First, blacks moved to the North where there was less prejudice and where wage rates were higher. Second, the educational attainment of blacks increased, presumably allowing more blacks to compete for good jobs. Third, the activities of civil rights groups and changing employer attitudes opened opportunities for blacks. Finally, the 1965 law banned discrimination in all aspects of employment. The actual trends are mixed, with clear gains on some indicators but no improvements on others.

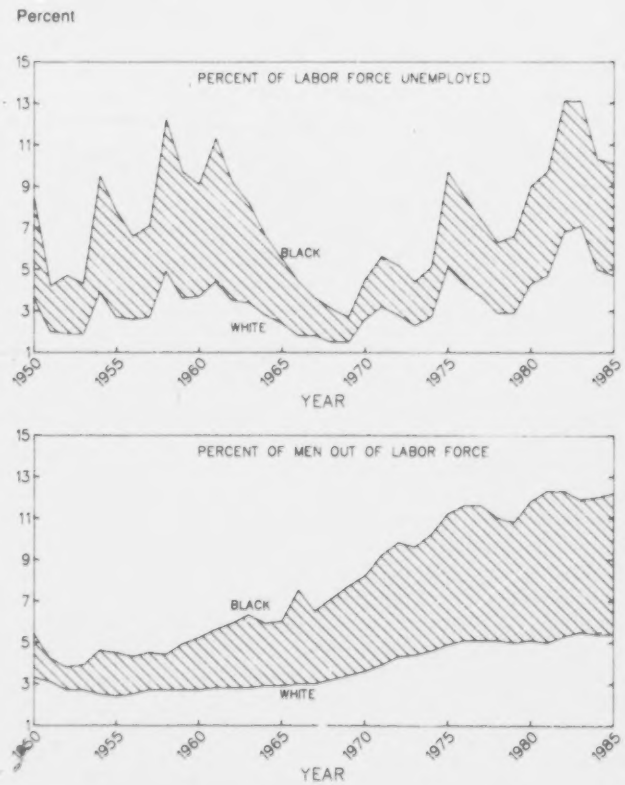
Unemployment and Labor Force Participation. The monthly unemployment rate—that is, the percent of labor force participants who look for work but cannot find it[23]—is the most widely cited gauge of economic status. This rate, of course, varies inversely with the rate of economic growth. Among adult black men it fell to a low of 3 percent during the late 1960s and reached a post-Depression high of 13 percent at the start of the 1980s. Thirty years ago the unemployment rate of black men first attained a level twice that of white men, and there has been little change in that ratio since then.[24] The upper panel of Chart 2 shows the proportion of male labor force participants 25 to 54 who were employed.

The lower panel of Chart 2 reports the proportion of adult black and white men, 25 to 54, who were neither at work nor looking for a job; that is, they were not participating in the labor force. At these ages, only a small fraction are out of the labor force because they are full-time students or retirees. Among black men there has been a persistent rise in non-participation since 1960, a trend hardly influenced by year-to-year changes in economic conditions. By the early 1980s, one black man out of eight had dropped out of the labor force; among whites, about one in twenty.

Some explanations for this phenomenon contend that many black men lack the skills to be employed or have personal habits and criminal records which make them unacceptable to employers.[25] Others believe that the expansion of federal welfare programs offers attractive alternatives to men who have limited earnings potential.[26] Another view stresses that blacks are concentrated within cities, while the growth of employment is occurring in suburbs, often in areas far from central city ghettoes.[27]

However, there is no single convincing explanation for the sharp increase in the proportion of black men who are neither working nor looking for employment. High unemployment rates and low rates of labor force participation are not restricted to young black men, to those in central cities, or to those who dropped out of school. Table 2 is based upon data from the Census Bureau's March 1985 Current Population Survey and classifies men by age, residence, and educational attainment. It indicates the unemployment rate, the proportion out of the labor force, and the proportion of men who did not work at all in 1984. For almost all groups—including those in the suburbs and those with five years of college—the unemployment rate for blacks was double that of comparable white men, and the proportion who were out of the labor force in 1985 or who did not work during 1984 was much higher.

CHART 2. Percent of Labor Force Unemployed and Percent of Total Population Out of Labor Force for Men 25 to 54, 1950 to 1985*



*These data are the annual averages which are developed from the monthly estimates. They have been standardized for age to remove the confounding effects of changes in age structure. Data refer to whites and nonwhites in all years.

Sources: U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics: 1978*, Bulletin 2000 (January, 1979), Table 4; *Handbook of Labor Statistics*, Bulletin 2217 (June, 1985), Table 5; *Labor Force Statistics Derived from the Current Population Survey: A Databook* (September, 1982), Vol. I, Table B-8; *Employment and Earnings*, Vol. 32, No. 1 (January, 1985), Tables 3 and 4; Vol. 33, No. 1 (January, 1986), Tables 3 and 4.

*This concludes the article begun in the previous issue, in which the author discussed progress in the areas of voting and citizenship rights, residency and housing, and education.

TABLE 2. Percent Unemployed in 1985, Percent Who Did Not Work in 1984, and Percent out of Labor Force in 1985, for Black and White Men Classified by Age, Place of Residence, and Educational Attainment.

Classification	Percent Unemployed in March 1985		Percent out of Labor Force in 1985		Percent Who Did Not Work in 1984	
	Black	White	Black	White	Black	White
Age						
15-24	32	13	47	33	49	24
25-34	15	6	14	5	18	6
35-44	13	5	13	5	17	6
45-54	10	5	16	8	17	9
55-64	10	4	46	31	41	25
65+	9	4	85	83	81	78
Place of Residence (Men 15 and Older)						
*North and West**						
City of Large SMSA	21	8	40	31	40	29
Suburbs of Large SMSA	15	6	36	23	33	19
Other SMSA	20	8	38	25	39	21
Non-Metropolitan	19	9	38	28	45	22
*South**						
City of Large SMSA	8	6	33	23	35	21
Suburbs of Large SMSA	14	3	20	22	19	18
Other SMSA	14	5	32	26	32	23
Non-Metropolitan	16	6	38	30	33	26
Educational Attainment (Men 25 and Older)						
Elementary	14	10	59	55	58	53
High School, 1-3	16	10	30	32	31	31
High School, 4	14	6	18	19	20	18
College, 1-3	11	4	13	15	17	14
College, 4	8	3	10	11	13	11
College, 5+	5	2	18	11	13	10

*These data pertain to the ten largest metropolises in each region. Central cities are distinguished from suburban rings.
Source: U.S. Bureau of the Census, *Current Population Survey*, March, 1985 (Tape File).

When age groups other than 25 to 54 are considered, we find some trends which are similar and others which are different. Among those over 54, labor force participation has declined because of improved Social Security benefits, better private pensions, and the greater availability of Supplemental Security Income. At the other end of the age scale, there has been an increase in the employment of white youths but not of black. Indeed, all indicators report that the employment situation of young blacks *vis-á-vis* that of whites has deteriorated since 1960.[28] Whites are now much more likely than blacks to hold jobs while they attend school or when they move from the completion of high school into their twenties.

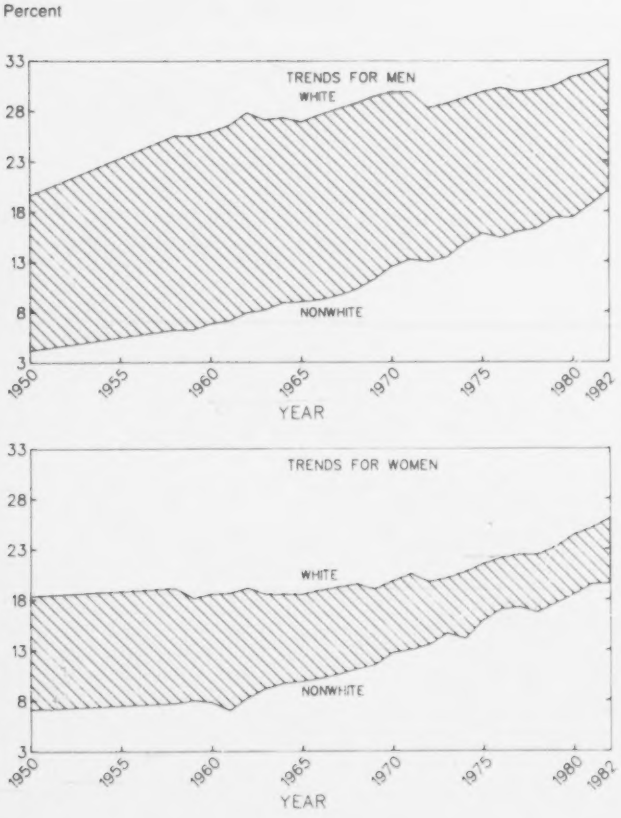
For both races there has been a steady rise in the employment of women. The recent increases, however, have been greater for whites. Traditionally a higher proportion of black than white women held jobs, but, by the early 1980s, white women caught up with black women in terms of employment.[29]

Occupational Achievement. Unlike the indicators of employment itself, there is unambiguous evidence that the occupational distribution of employed blacks has been upgraded and is gradually becoming similar to that of whites. At the end of World War II, blacks were concentrated in a narrow range of unskilled occupations: 69 percent of the black men in 1950 worked on farms or as laborers or machine operators; 50 percent of black women were domestic servants or farm laborers.[30] As blacks moved into cities and their educational attainments rose, they obtained better jobs.

Chart 3 indicates this by showing the proportion of employed workers who held professional or managerial jobs from 1950 to 1982.[31] The occupational distribution of whites improved as the focus of the economy shifted from blue collar jobs to white collar and service jobs. The changes, however, were greater among blacks. For example, the percent of white men with jobs at the top of the occupational ladder went up from 20 to 32 percent; for black men, from 6 to 20 percent.

Numerous investigators have analyzed racial differences across the entire occupational distribution, and their findings demonstrate that employed blacks moved into better jobs more rapidly than whites and that upgrading continued throughout the 1970s and into the 1980s.[32] Studies of occupational mobility also report a declining net effect of race, suggesting that the process is becoming more egalitarian.[33] Nevertheless, large occupational differences remain. In 1982 the proportion of black men with professional or managerial jobs was equal to what it was among white men three decades

CHART 3. Percent of Employed Workers Holding Professional or Managerial Jobs by Race and Sex, 1950 to 1982



Sources: U.S. Bureau of the Census, *Census of Population: 1950*, P-C1, Table 128; U.S. Bureau of Labor Statistics, *Handbook of Labor Statistics: 1978* (June, 1979), Table 18; *Employment and Earnings*, Vol. 26, No. 1; Vol. 27, No. 1; Vol. 28, No. 1; Vol. 29, No. 1; Vol. 30, No. 1, Table 22 in each publication.

earlier. Among women the corresponding lag was two decades. Several more decades will be required before the occupational distributions of employed blacks and whites are similar.

Earnings of Employed Workers. Findings from many studies show that blacks once earned much less than similar whites, but this racial difference has declined among men and has just about disappeared among women.[1,34] This is often accepted as evidence that racial discrimination in pay rates has been substantially reduced and, perhaps, even eliminated among women.

The decennial enumerations and the Census Bureau's March surveys ask national samples about their earnings, hours of employment, and educational attainment. These data may be used to fit models which relate the wages of workers to those factors which influence earnings. The analysis reported here is based upon data from the Census of 1960 and surveys conducted in March of 1970, 1980, and 1985. All noninstitutionalized persons 25 to 64 who reported cash earnings during the previous year were included.[35]

Trends in the relative earnings of blacks are described in Table 3, which shows the average *hourly* and *annual earnings* of blacks as a percent of those of whites. Then, using a model which sees hourly earnings as a function of education, place of residence, and years elapsed since completion of school, i.e., years of potential labor market experience, estimates were derived for blacks and whites with specific characteristics such as college education or southern residence.[36]

In 1960 black men had hourly earnings 61 percent those of white men, and in the next two decades this increased to 74 percent. Black men do less well on an annual basis because they experience much more unemployment. Nevertheless, the annual earnings of black men as a percent of those of whites increased from 52 percent in 1960 to 66 percent in 1980.

When men are classified by region, education, and years of experience, we find that racial differences in relative earnings were much smaller in the North than in the South. However, racial differences varied little by educational level or by years of experience. Regardless of how long they spent in school, black men earned about 60 percent as much as white men in 1960 and 75 percent as much in 1980.

The 1960s and 1970s were decades of improvements in the relative earnings of black men, but there has been stagnation in the 1980s. An examination of annual data shows that the earnings of blacks rose more rapidly than those of whites until the recession of 1973-75. Following that, the earnings of men—in constant dollars—generally fell with the rates of decline being similar for both races. That recession marked a turning point, since there has been no racial convergence of the earnings of black and white men in the last decade.

The racial gap in earnings closed much more rapidly among women. In 1960 black women's hourly earnings were 61 percent of those of white women, but this increased to 98 percent by 1980, and in 1985 the hourly earnings of black women exceeded those of whites. In the past employed black women worked fewer hours than white women. Black women now report greater hours of employment, and, as a result, the average annual earnings of black women are in excess of those of white women.

When the earnings of women with specific characteristics are compared, we see that black women in 1960—with the exception of college graduates—were far behind white women. By 1980 there was racial parity, and, unlike the situation among men, the earnings of black women relative to those of white women continued to rise in the 1980s.

Trends in the earnings of employed workers provide clear evidence of racial progress. The investigation of Smith and Welch shows that differences among men also declined in the 1940 to 1960 era.[1] By 1980 black men—on an annual basis—earned about two-thirds as much as white men. When differences in education, residence, experience, and hours of work were taken into account, they earned about 85 percent as much.[37] Black women showed even greater improvement, and by 1980 they earned as much as comparable white women.

Family Income and Poverty. Two indicators which are frequently cited as key measures of economic welfare are the ratio of black to white family income and the percentage of blacks below the poverty line. Since the earnings of blacks have risen more rapidly than those of whites, we might expect an improvement for blacks on these indicators. The actual trends are mixed and have been confounded by changes in family structure.[38].

Chart 4 shows the median income of black families as a percent of that of whites and the proportion of blacks and whites below the poverty line since 1959, the first year for which the Census Bureau compiled such data. Throughout

TABLE 3. Earnings of Employed Blacks as a Percent of Those of Whites, Persons 25 to 64, 1960 to 1985 (Amounts Shown in 1984 Dollars)

Earnings and Classification	1960	1970	1980	1985
Hourly Earnings of Men	61	68	74	74
Annual Earnings of Men	52	59	66	65
Annual Earnings for Men with Specific Characteristics				
Place of Residence				
North and West	67	68	71	66
South	48	56	64	65
Educational Attainment				
9 Years	60	68	73	69
12 Years	57	63	74	70
16 Years	60	60	78	76
Years of Labor Force Experience				
5 Years	54	61	73	68
15 Years	53	59	65	66
25 Years	53	58	62	62
35 Years	53	57	64	66
Hourly Earnings of Women	61	75	98	101
Annual Earnings of Women	55	74	103	107
Annual Earnings for Women with Specific Characteristics				
Place of Residence				
North and West	72	88	113	117
South	59	67	98	103
Educational Attainment				
9 Years	74	76	106	111
12 Years	74	98	107	111
16 Years	97	103	117	118
Years of Labor Force Experience				
5 Years	54	87	101	98
15 Years	56	91	104	106
25 Years	56	71	104	111
35 Years	54	69	102	113

Source: U.S. Bureau of the Census, *Census of Population and Housing: 1960*, Public Use Sample (Tape File); *Current Population Survey*, March 1970, March 1980, and March 1985, Public Use Samples (Tape Files).

the 1960s the incomes of black families rose more rapidly than those of whites, so the black median as a percent of white median income increased from 54 to 60 percent. The proportion of blacks improverished fell sharply in the 1960s, reaching a minimum of 30 percent in the early 1970s. The continued urbanization of blacks and increases in earnings help account for the progress of that period.

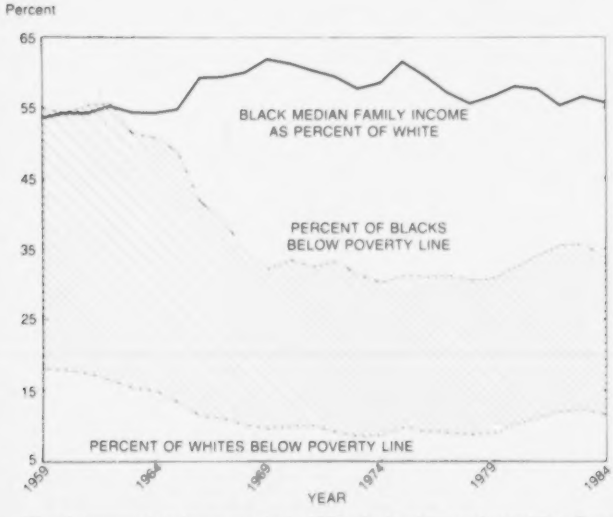
Since the early 1970s blacks have made no gains on these indicators. The proportion impoverished actually increased and the ratio of black-to-white family income declined. The fact that the earnings of black males are no longer rising faster than those of whites and that there is no longer a migration from southern farms to cities plays a role, but changes in family structure are also important.

At all dates, poverty rates have been high and income levels low in families headed by women.[39] In 1984, for example, 52 percent of the black families with a woman as head-of-household were below the poverty line, compared to 15 percent of the black married-couple families.[40] While similar trends are occurring in white families, there has been a sharper increase in the proportion of blacks living in these female-maintained families which have high poverty rates.

Table 4 summarizes changes in family living arrangements. Because of delays in age at first marriage and the increasing frequency of marital disruption, the proportion of adult women who live with husbands has fallen, and by 1984 fewer than 30 percent of black women 15 to 44 lived with a spouse.[41] Women have delayed their childbearing much less than the timing of their marriage so there has been a sharp increase in the percent of births occurring to unmarried women. By 1983 about six-in-ten black children and one-in-eight white were delivered to unmarried women.[42]

Delays in marriage, more frequent martial disruption, and more childbearing prior to marriage mean that a growing proportion of families with children are maintained by women who have no husband present (see Table 4). As a corollary

CHART 4. Median Income of Black Families as a Percent of that of Whites and Percent of Blacks and Whites below the Poverty Line, 1959 to 1984*



*Family income data for years prior to 1967 refer to whites and nonwhites. Poverty data for blacks for the years 1960 to 1966 are estimates.

Sources: U.S. Bureau of the Census, *Current Population Reports*, Series P-60, No. 146, Table 15; No. 147, Table 1; No. 149, Tables 3 and 15.

of these changes, the majority of black children under 18 now live in families headed by a woman rather than by a married couple. Two-thirds of these children were in impoverished families.[40]

Table 4 indicates that, although family structure is changing among whites, blacks and whites have become increasingly different on all these indicators since 1960. These changes are certainly not the single cause and, perhaps, not the major cause of the persistently high poverty rate among blacks; however, they are a significant factor. If all blacks and whites lived in husband-wife families, blacks would still have high poverty rates, but they would be twice, rather than three times, those of whites. The median income of black families would be about 80 percent that of white families rather than the actual value: 54 percent in 1984.[40] Indicators of the economic status of black families would not be so bleak had not the living arrangements of black adults and children changed so rapidly.[43]

The Nature of Black Progress

The conclusions which are drawn about the changing status of blacks depends upon which indicators are stressed. Those who believe that this nation is a melting pot will place great weight upon the narrowing of black-white gaps in educational attainment, in the earnings of employed workers, and in occupational prestige. They will point to the rapid growth of a prosperous black middle class and will note that, for the first time, blacks now have real political power. A large fraction of the black population took advantage of the opportunities which, they believe, were created when the United States faced its racial dilemma.[44]

Those who defend this model of society recognize that many other blacks are not succeeding. Increasingly the term "urban underclass" describes those ghetto residents who seem unable or unwilling to move into the economic mainstream. According to the melting pot view, European and Asian immigrants were once in a similar position, but they escaped poverty, not by depending upon welfare and affirmative action, but rather by taking menial jobs or starting small businesses. The fact that so many blacks prosper is proof, for them, that racial discrimination is no longer a major issue.

A variety of commentators argue that the availability of governmental payments lessens incentives for the poor and makes them even more dependent.[45] In particular, it undercuts the role of black men and leads to frequent marital disruption and high rates of childbearing outside marriage, which are assumed to be the unintended effect of governmental programs, rather than the result of present or past white racism. The problems of blacks will be solved, not by new civil rights laws or more welfare, but rather when blacks capitalize on the opportunities now available. This means accepting those low-income jobs which have traditionally been filled by immigrants and which are now very attractive to hundreds of thousands of Latin Americans.

Contradictory conclusions and policy recommendations will be offered by those who see this nation as fundamentally polarized by race and economic issues.[46] While recognizing that important changes have occurred in voting rights, educational attainment, and earnings, they will stress that black-white differences remain large. Despite decades of gains, black men in 1984 earned only 65 percent as much as white men, and blacks are still much more likely than whites to be doing manual labor or operating a machine. They see claims about the black middle class as inflated, since blacks – even those with high incomes – have assets which are a small fraction of those of whites with similar incomes.[47] Other indicators are even more disturbing. In terms of unemployment rates and labor force participation, black men made no gains in the 1980s, and the number of black poor increased from 7.2 to 9.5 million in the decade following 1974.[40,48]

Rather than stressing that blacks are failing to utilize available opportunities, defenders of this model contend that the nation has not altered those basic social and economic arrangements which keep blacks at a great disadvantage. Symbolic changes may be accepted but real changes are seldom made. The *Brown* decision failed to integrate schools in the metropolitan areas where most blacks live. Title VII of the Civil Rights Act of 1965 called for equal employment opportunities, but the employment situation for black men has worsened since then. The Fair Housing Act of 1968 was not followed by a break-down of the chocolate city-vanilla suburbs pattern.

It is impossible to answer a question about black progress with a simple yes or no. It is clear that white Americans have made fundamental changes in our social institutions which extend the practices and principles of democracy to blacks, but it is also clear that neither the melting pot nor the polarization model adequately describes the racial situation in a nation of 230 million.

In his 1965 speech at Howard University's commencement, President Johnson asserted that you cannot take a man who has been hobbled by chains, liberate him, and expect him to compete fairly with all the others.[49] Many programs of the War on Poverty attempted to compensate for some of the inequities in the status of blacks, but current support for such policies is lacking. Quite likely, racial differences will persist and some, such as those relating to family income and poverty, will grow larger.

TABLE 4. Indicators of Racial Differences in Marital and Family Status, 1960 to Mid-1980s

Year	White	Black	Racial Difference
Percent of Women 15 to 44 Living with Husband			
1960*	69	52	17
1970	61	42	19
1980	55	30	25
1984	55	28	27
Percent of Births Delivered to Unmarried Women			
1960*	2	22	20
1970	6	35	29
1980	11	55	44
1983	13	58	45
Percent of Families with Children under 18 Maintained by a Woman			
1960*	6	24	18
1970	9	33	24
1980	14	48	34
1984	15	50	35
Percent of Children under Age 18 in Mother-only Families			
1960*	6	20	14
1970	8	29	21
1980	14	44	30
1984	15	50	35

*Data for 1960 refer to whites and nonwhites.

Source: U.S. Bureau of the Census, *Census of Population: 1960*, PC(1)-1D, Table 76; PC(2)-4A, Table 2; *Census of Population: 1970*, PC(1)-D1, Table 203; *Census of Population: 1980*, PB80-1-D1-A, Table 264; *Current Population Reports*, Series P-20, No. 212, Table 4; No. 218, Table 1; No. 365, Table 4; No. 366, Table 1; No. 398, Table 1; No. 399, Table 4; U.S. National Center for Health Statistics, *Vital Statistics of the United States: 1970*, Vol. 1-Natality, Table 1-29, *Monthly Vital Statistics Reports*, Vol. 31, No. 8 (Supplement), November 30, 1982, Table 15; Vol. 34, No. 6 (Supplement), September 20, 1985, Table 17.

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[31]A new system for classifying occupations was introduced in the Census of 1980 and in the Current Population Survey in 1983. The new occupational categories are not comparable to the old, so the time series reported in this figure cannot be extended to more recent dates. S.M. Bianchi and N. Rytina, *Demography*, 24,79 (1986).

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[35]This analysis is based upon data for persons who reported that their race was black or white and that they worked in the year prior to the census or survey and had wage, salary, or self-employment earnings of $1 or more.

[36]This model uses the log of the hourly wage rate as its dependent variable. This is regressed upon years of elementary and secondary education, years of collegiate education, years elapsed since estimated completion of schooling, the square of that variable, and a dichotomous variable indicating southern residence.

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[38]S.M. Bianchi, *Household Composition and Racial Inequality* (Rutgers, New Brunswick, 1981).

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Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	Actual							Projected					Act'l.	Projected	
	85:1	85:2	85:3	85:4	86:1	86:2	86:3	86:3	86:4	87:1	87:2	87:3	1985	1986	1987
GROSS NATIONAL PRODUCT	3,909	3,965	4,031	4,088	4,149	4,176	4,234	4,230	4,288	4,349	4,409	4,475	3,998	4,213	4,448
GNP IMPLICIT PRICE DEFLATOR (index, 1982 = 100)	110.2	111.1	111.8	112.8	113.5	114.0	115.0	114.7	115.2	116.1	117.0	117.7	111.5	114.4	117.3
CORPORATE PROFITS AFTER TAXES	126.0	126.7	133.4	139.4	135.2	138.0	NA	140.3	145.0	143.4	146.3	147.0	131.4	140.5	148.0
UNEMPLOYMENT RATE (percent)	7.33	7.30	7.17	7.00	7.07	7.17	6.90	7.00	7.00	6.95	6.90	6.80	7.20	7.10	6.90
INDUSTRIAL PRODUCTION* (index, 1977 = 100)	123.1	123.5	124.0	124.7	125.0	124.4	125.1	125.0	125.9	126.5	128.0	129.6	123.8	125.0	128.7
NEW PRIVATE HOUSING UNITS STARTED (millions)	1.762	1.743	1.688	1.773	1.998	1.908	1.760	1.871	1.884	1.840	1.800	1.785	1.741	1.914	1.790
CONSUMER PRICE INDEX (annualized percent change from prior quarter or year)	3.21	4.05	2.56	4.32	1.44	-1.66	2.60	2.90	3.32	3.50	3.50	3.70	3.54	2.00	3.30
3-MONTH TREASURY BILL RATE (percent)	8.18	7.52	7.10	7.15	6.89	6.13	5.53	5.68	5.42	5.53	5.65	5.80	7.49	6.04	5.72
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	12.57	11.88	11.52	11.04	9.68	9.06	NA	8.70	8.45	8.50	8.64	8.80	11.75	8.96	8.80
GNP IN 1982 DOLLARS	3,547	3,568	3,604	3,622	3,656	3,661	3,683	3,687	3,715	3,739	3,767	3,795	3,585	3,681	3,780
PERSONAL CONSUMPTION EXPENDITURES (1982 dollars)	2,292	2,312	2,342	2,352	2,373	2,408	2,450	2,426	2,440	2,455	2,473	2,494	2,324	2,412	2,481
NONRESIDENTIAL FIXED INVESTMENT (1982 dollars)	442.7	463.0	463.1	476.9	457.8	456.8	457.1	452.0	453.6	453.9	453.6	458.6	461.4	454.8	457.1
RESIDENTIAL FIXED INVESTMENT (1982 dollars)	172.4	175.1	180.0	181.5	186.3	192.7	196.1	196.0	196.4	196.5	197.0	197.5	177.3	192.4	197.3
CHANGE IN BUSINESS INVENTORIES (1982 dollars)	23.2	17.4	0.7	-5.2	39.9	15.1	-4.5	16.0	18.0	20.0	22.0	23.0	9.0	21.6	23.0
NET EXPORTS (1982 dollars)	-78.8	-108	-114	-132	-126	-154	-165	-142	-134	-120	-110	-103	-108	-137	-106
FEDERAL GOVERNMENT PURCHASES (1982 dollars)	305.8	311.4	329.9	347.2	320.4	328.9	329.3	328.0	331.0	329.2	329.6	334.0	323.6	327.0	333.0
STATE AND LOCAL GOVERNMENT PURCHASES (1982 dollars)	389.5	396.9	401.9	402.2	404.8	413.3	419.5	415.0	416.0	418.0	420.0	421.0	397.6	412.0	420.0

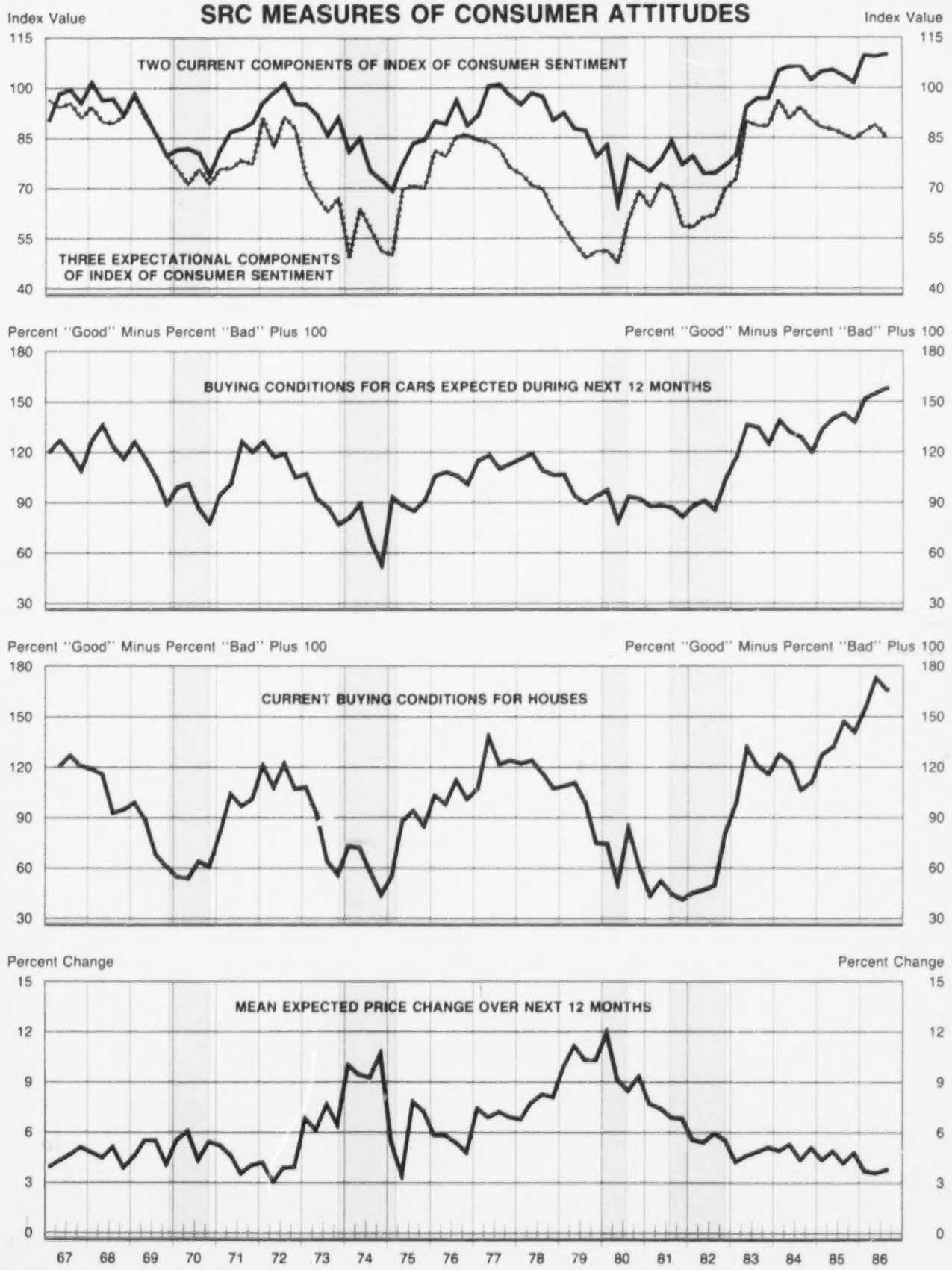
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS															
ECONOMIC INDICATOR	Quarterly Data												Annual Data		
	83:4	84:1	84:2	84:3	84:4	85:1	85:2	85:3	85:4	86:1	86:2	86:3	1983	1984	1985
GROSS NATIONAL PRODUCT	3,546	3,671	3,744	3,800	3,846	3,909	3,965	4,031	4,088	4,149	4,176	4,234	3,406	3,765	3,998
PERSONAL CONSUMPTION EXPENDITURES	2,316	2,364	2,416	2,446	2,487	2,531	2,576	2,627	2,668	2,698	2,732	2,799	2,235	2,428	2,600
GROSS PRIVATE DOMESTIC INVESTMENT	579.8	659.5	657.5	670.3	661.1	650.6	667.1	657.4	669.5	708.3	687.3	674.7	502.3	662.1	661.1
NET EXPORTS	-25.8	-45.6	-63.2	-60.0	-66.1	-49.4	-77.1	-83.7	-105	-93.7	-104	-110	-6.1	-58.7	-78.9
GOVERNMENT PURCHASES	676.1	693.2	733.3	743.8	763.4	777.3	799.0	829.7	855.6	836.7	860.8	870.4	675.0	733.4	815.4
DISPOSABLE PERSONAL INCOME	2,528	2,613	2,646	2,694	2,730	2,755	2,842	2,832	2,882	2,935	2,979	2,983	2,428	2,671	2,828
PERSONAL SAVING RATE (percent of disposable income)	5.8	6.9	6.0	6.4	6.0	5.2	6.5	4.2	4.4	5.0	5.1	2.9	5.4	6.3	5.1

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late October, and projected data, released by ASA-NBER in September, are displayed for third quarter 1986.

Sources: Projections: American Statistical Association – National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

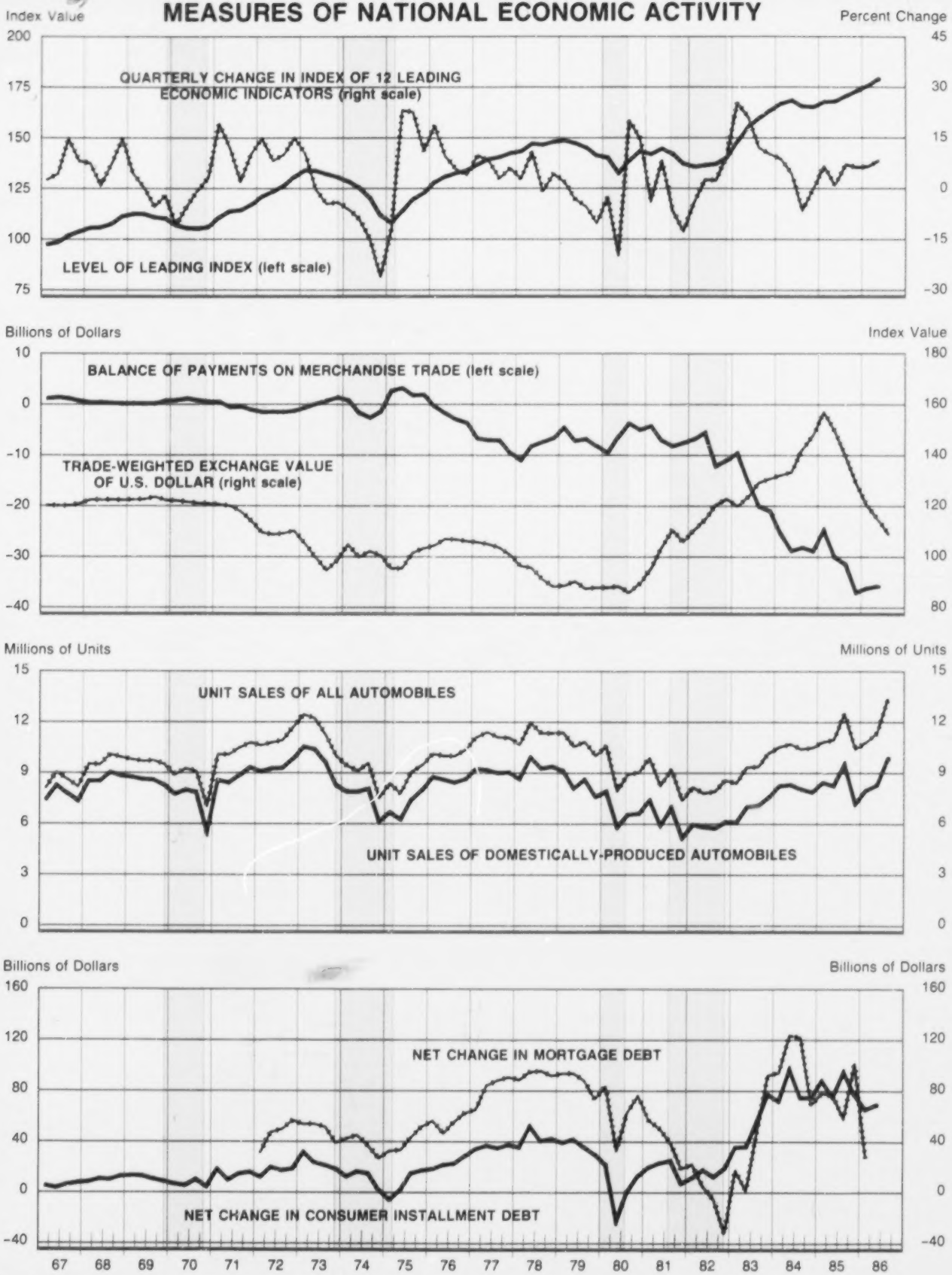
*Substantial revision of the data for variables marked with an asterisk has occurred since the last printing.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

MEASURES OF NATIONAL ECONOMIC ACTIVITY



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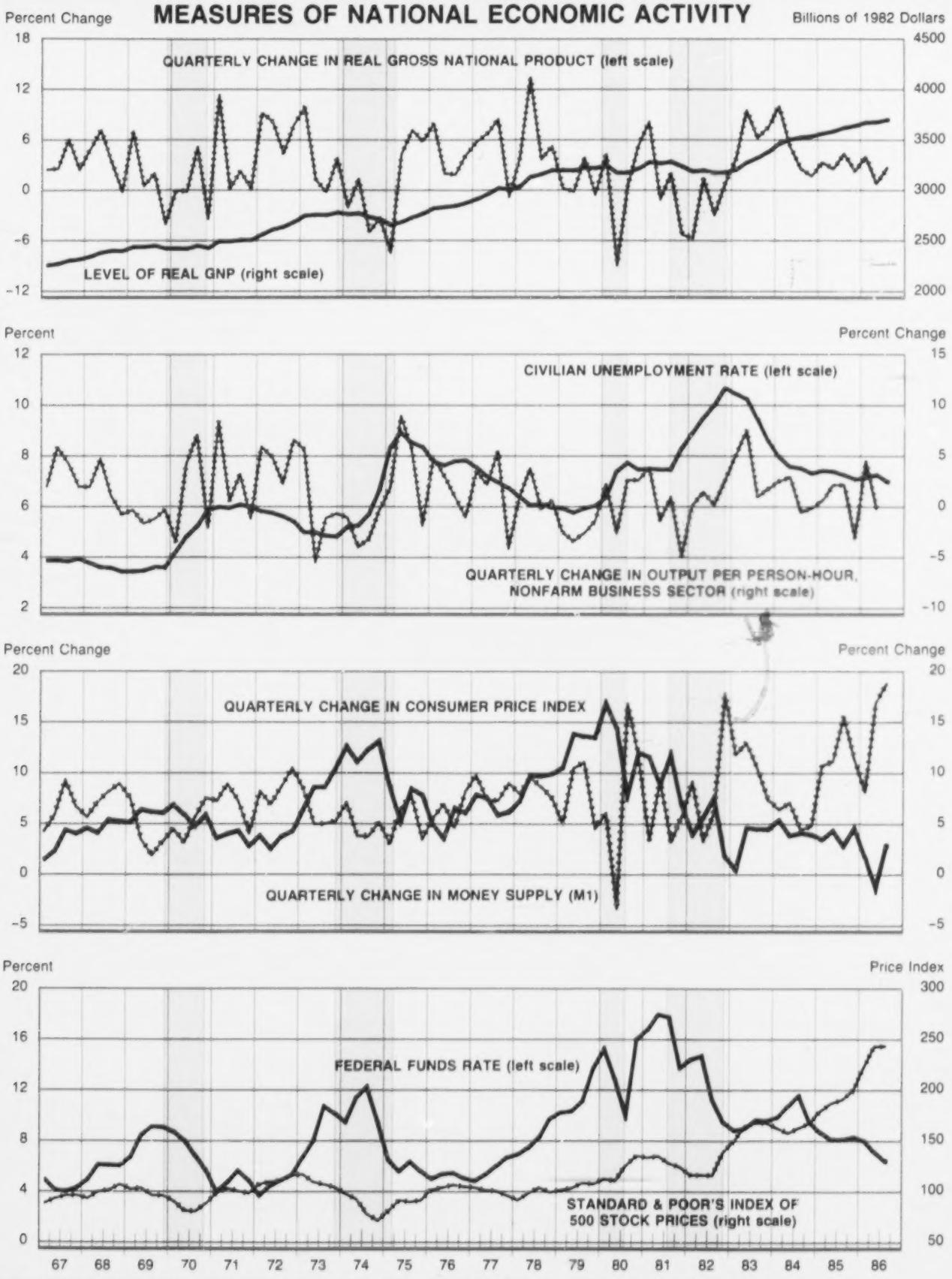

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1987 FORECAST ISSUE

S.H. Hymans, J.P. Crary, and J.C. Wolfe
The U.S. Economic Outlook for 1987-88

Paul W. McCracken
Foreign Trade Improvement to Boost Economy

Richard T. Curtin
The Discount Waiting Game

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What Do We Know about Saving Behavior?

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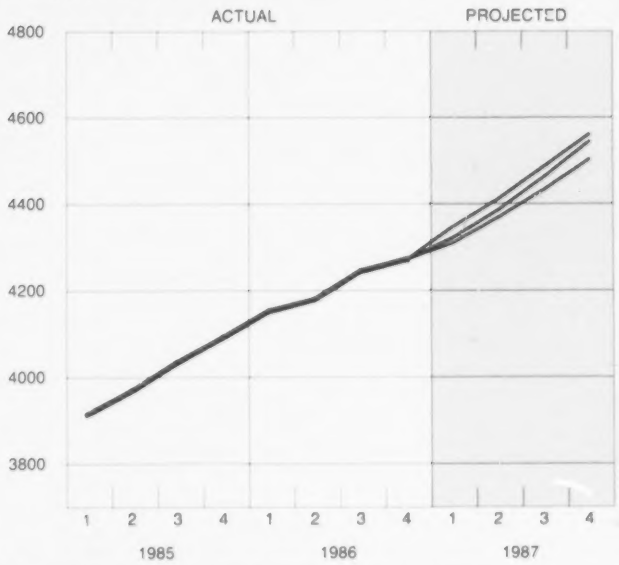
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

GROSS NATIONAL PRODUCT

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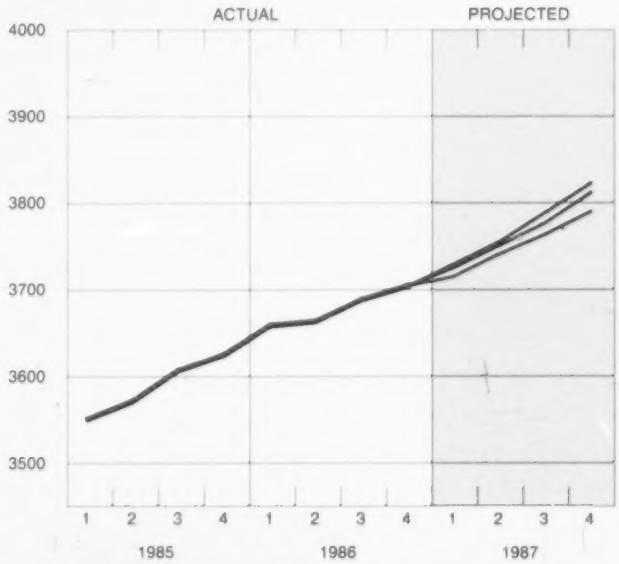

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The U.S. Economic Outlook for 1987-88[1]

Saul H. Hymans, Joan P. Crary, and Janet C. Wolfe
Research Seminar in Quantitative Economics
The University of Michigan

Review of the Forecast for 1986

For technical reasons it is a bit more difficult to review the accuracy of last year's forecast this year than is normally the case. One month after last year's Outlook Conference the U.S. Department of Commerce began to release a Benchmark Revision of the National Income and Product Accounts. This data revision incorporated important definitional changes in a number of categories, an improvement in the measurement of a number of expenditure and price series, and an updating of the base year for the calculation of real (or constant dollar) magnitudes from 1972 to 1982.

By mid-February we had completed our first pass at converting the Michigan Model to the new data base, and subsequent forecasts have focused on real GNP in billions of 1982 dollars. Last November's forecast, of course, was based on the old data; and the constant dollar magnitudes forecast at that time cannot be evaluated with direct reference to currently published data. To provide a means for evaluating the accuracy of the forecast, we have converted last year's real GNP forecast from a 1972 base to a 1982 base in the following way. We applied the 2.93 percent which we had forecast for the growth of real GNP between calendar 1985 and calendar 1986 to the 1985 level of real GNP in 1982 dollars published in July 1986. This yielded an increase of 105 billion 1982 dollars.[2] In comparing this with our current estimate of a $92.2 billion increase in real GNP for the year, we get an overestimate of real GNP of $12.8 billion—a forecast error amounting to 14 percent of the currently estimated *increase* in real GNP, but only one third of one percent of the currently estimated *level* of real GNP.

As usual we cannot be content with an evaluation of the forecast based only on the calendar year level of real GNP, even if that happens to be satisfactorily accurate. For most consumers of macroeconomic forecasts, many dimensions of the forecast are of importance—including major components of GNP, prices and interest rates, incomes, unemployment, and the dynamic trajectory of all these variables.

We provide the basic data needed to carry out a more useful evaluation of last year's forecast in Table 1. Because of the major data revision, we are not presenting the predicted and actual changes of real GNP components *in dollar units* as in prior years. The substantial relative price movements from 1972 to 1982 and the definitional changes embodied in the benchmark revision make it impossible to come up with an algebraically consistent decomposition of the error in forecasting GNP and its components. The top portion of Table 1 therefore compares our predicted *percent changes* in real GNP and its components on a 1972 dollar base with current estimates of the percent changes in those same categories on a 1982 dollar base. While not entirely satisfactory, this seems to us to be the best course available for evaluating last year's forecast in some depth.

Our prediction that total production, or real GNP, would be up by 2.9 percent for calendar 1986 is quite close to our current estimate of a gain of 2.6 percent (see the second and third columns of Table 1). We were extremely close as well for a number of major components of real GNP including investment in producers' durable equipment, residential construction, and exports of goods and services. On the other hand, we made two major forecasting errors which contributed an excessive upward push to real GNP—a substantial overestimate of nonresidential construction activity and a large underestimate of the increase in imports. These errors were approximately balanced by our underestimates of both consumer and government purchases.

The data in the "Prices and Incomes" section of Table 1 throw considerable light on the errors we made in forecasting the composition of real GNP. It is clear that we were much too high in our forecast of the rate of inflation. In the case of consumer prices, for example, we had projected a 3.9 percent rise in the price deflator for consumer expenditures, while it now appears that overall consumer prices will be up by only 2.1 percent this year. There are two principal reasons for the overestimate of inflation. First, we missed completely on the path of oil prices. We had assumed virtually no change in the average price of oil for 1986, while we now estimate a drop of nearly 43 percent for the year. Second, although we were very close in our forecast of the exchange value of the dollar, we were way too high on the dollar price of nonoil imports. We had expected that a drop in the value of the dollar of about 18 percent would be accompanied by a drop of only about 4 percent in the *foreign currency* price of nonoil imports, which produced the 14 percent hike in the dollar price of nonoil imports shown in the table. Instead, a 22 percent drop in the value of the dollar was nearly wiped out by a drop of 19 percent in the foreign currency price of nonoil imports—as foreign margins were reduced to hold market share and some foreign production was shifted "offshore"—with the result that the price of nonoil imports actually rose by less than 3 percent. With oil prices down sharply and other import prices changing little, the overall level of consumer prices increased by nearly two percentage points less than we had anticipated.

As a result, our highly accurate forecast of the gain in nominal disposable income corresponded to a serious underestimate of the gain in consumer purchasing power, or real disposable income, which accounts almost exactly for our shortfall in consumer purchases. And the near-stability of nonoil import prices combined with the sharp drop in oil prices to produce far more imports than we had anticipated.

The negative side of the low oil price regime appears in our forecast error for nonresidential construction. As the oil patch region of the country hit the skids, oil field activity—much of which is classified as nonresidential construction—dropped sharply right at the start of 1986.

With inflation at extremely moderate levels and output growth generally sluggish after the early months of this year,

[1]This is an edited version of the paper presented by Dr. Hymans at the opening session of the 34th annual Conference on the Economic Outlook, November 20, 1986.

[2]It might be argued that we should have used the first estimate of 1985's real GNP published in January of 1986. This would have yielded a "forecast" of $104.7 billion instead of $105 billion.

TABLE 1. Review of RSQE Forecast for 1986

Economic Indicator	1984-85 Actual[1]	1985-86 Calendar Year Predicted[2]	1985-86 Calendar Year Actual[3]	1985:3-1986:3 Predicted[2]	1985:3-1986:3 Actual[3]
Percent Changes					
Real GNP and Components (1982 dollars)					
GNP	2.7	2.9	2.6	3.0	2.2
Personal Consumption Expenditures	3.5	2.6	4.0	1.9	4.6
Durable Goods	7.8	1.2	5.4	-2.5	8.4
Nondurables and Services	2.8	2.8	3.7	2.9	4.0
Producers' Durable Equipment	10.1	3.0	3.4	3.0	5.3
Nonresidential Construction	7.7	7.5	-11.8	9.8	-14.8
Residential Construction	3.9	9.0	9.2	8.7	8.9
Exports	-2.0	2.5	2.5	4.2	4.8
Imports	3.8	2.1	10.4	2.4	14.5
Government Purchases	6.8	1.3	3.0	-1.2	2.3
Prices and Incomes					
Price Deflators					
Private Nonfarm Sector	3.5	3.4	2.6	3.6	2.4
Consumption Expenditures	3.5	3.9	2.1	4.2	1.8
Oil Imports	-6.1	-0.6	-42.7	1.2	-52.8
Exchange Value of U.S. Dollar	3.7	-17.7	-22.2	-17.0	-22.7
Dollar Price of Nonoil Imports	-1.7	14.0	2.8	17.0	3.3
Current Dollar Disposable Income	5.9	5.7	5.4	6.5	5.3
Real Disposable Income	2.3	1.8	3.2	2.2	3.4
Level in Terminal Year or Quarter					
Civilian Unemployment Rate (percent)	7.20	7.27	7.06	7.28	6.93
3-Month Treasury Bill Rate (percent)	7.48	7.07	5.93	7.07	5.52
Corporate Aaa Rate (percent)	11.37	10.66	9.07	10.62	8.83
Federal Deficit (billions, fiscal year)	191.2	173.2	214.1	167.4	199.1

[1]Based on data published by U.S. Government Agencies.
[2]RSQE Forecast released in November 1985.
[3]First three quarters of 1986 based on published data; fourth quarter of 1986 as estimated by RSQE in November 1986.

interest rates moved down far more rapidly than we had anticipated, and the Fed accommodated the reduced pressure on interest rates with four successive reductions in the discount rate.

The last two columns of Table 1 record predicted and actual changes between 1985:3 and 1986:3. This permits an evaluation of last year's forecast based on its trajectory over the first four quarters of the forecast horizon. As would be expected, the quarter-over-quarter forecast accuracy is, on the whole, a bit worse than the year-over-year accuracy. The substantive story, however, is quite the same as that already reviewed.

Inputs: International Trade, Finance, and Monetary Policy

The economic outlook over our 1987-88 forecast horizon will be heavily influenced by factors affecting our international trade flows. And in today's world of interconnected, or open, economies there is an inevitable relationship between matters of international finance and domestic monetary policy. We shall therefore discuss our assumptions regarding these two critically important input factors as a related, or coordinated, pair.

The continued deterioration of our real net export balance over the entire 21 month period since the exchange value of the U.S. dollar peaked in February 1985 is one of the most surprising disappointments to come upon the modern macroeconomic scene. Professors and policy-makers can—as is often their wont—try to rescue a precious theorem by exclaiming "Think how much worse things would have been if the dollar hadn't depreciated!", but that hardly seems to cover much of the story. And none of this disappointment has anything to do with the celebrated "J-Curve," which explains why a currency depreciation leads at first to a deteriorating *nominal* trade balance even while the *real* trade balance is improving. We seem to be missing the first conclusion of the theorem—the improvement in the real trade balance. All that's required there are a few sizeable price elasticities, the existence of which nobody doubts even today. Then what *did* go wrong?

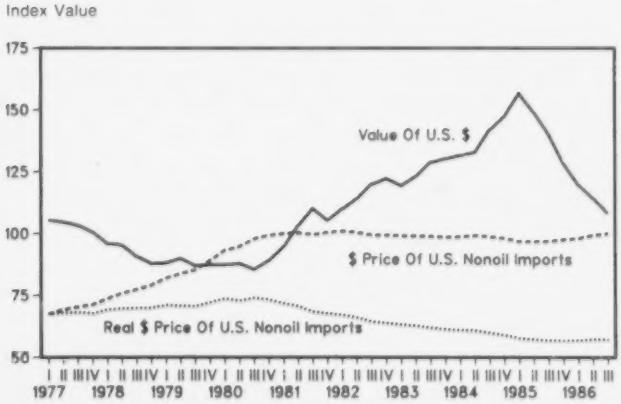
We have on several past occasions displayed a chart showing, for the dozen years prior to 1985, the overwhelmingly strong inverse relationship between the exchange value of the dollar and U.S. real net exports. When the quarters beginning in 1985 are added to that chart, a completely different relationship emerges: the latest drop in the value of the dollar is accompanied by a virtually parallel drop in real

net exports. The two panels of Chart 1 help to explain this apparent violation of economic law. Panel A compares the path of the exchange rate with an index of the price of U.S. exports denominated in (trade-weighted) foreign currency units. The strength of the positive relationship over the entire period from 1977 to the present is striking. When the dollar increased in value, our export goods became more expensive abroad; and the reverse when the dollar declined in value. Panel B, however, shows a quantitively looser relationship between the value of the dollar and the dollar-price of our nonoil imports. When the dollar declined in value from 1977 to 1980, we did indeed face rising import prices. But over the entire period from 1980 to early 1985, when the dollar rose dramatically, the dollar price of imports remained virtually constant; and since early 1985 sharp depreciation of the dollar has been accompanied by only a slight upward tilt in nonoil import prices, with most of that only in the past few quarters. Between 1980 and early 1985 foreign sellers took advantage of the rising dollar—virtually point-for-point—to increase their prices to us, as denominated in their own currencies—presumably, therefore, increasing profit margins. Since our own domestic price level was inflating over the same period, a constant *nominal* dollar-price of imports meant a declining *real* dollar-price of imports, and we increased our nonoil imports enormously over that period. When the dollar started to fall sharply in early 1985, there was plenty of room for foreign sellers to reduce prices, let the dollar-price of imports drift up very slowly, and thereby keep the real dollar-price of imports from rising at all until just the past few quarters. Small wonder that we've seen nothing better than a decline in the rate of increase of our nonoil imports since early 1985.

CHART 1.

A. Value of the Dollar and Export Prices

B. Value of the Dollar and Import Prices



We are forecasting a slow, but continuous, reduction in the rate of growth of our nonoil imports. Over the past year our real nonoil imports increased by 9.7 percent. We are forecasting growth rates of 8.9 percent and 6.2 percent, respectively, for each of the next two years. These outcomes reflect the overall developments in our macroeconomic forecast, but they also reflect an important input assumption, namely that the foreign currency price of our nonoil imports—which has been declining ever since early 1985—will have hit bottom by the end of this year, will begin rising by the spring of next year, and will be rising at an annual rate of 5 percent by the end of next year. Under those conditions, our model implies that the real dollar-price of nonoil imports—which increased by less than one percent over the past year—will increase by 3.4 percent and 4.4 percent, respectively, over each of the next two years.

We are also assuming a steady improvement in U.S. exports. In real terms, our exports have already begun to rise as U.S. goods have declined in price abroad. In addition, some of our trading partners are beginning to take steps to stimulate their own economies, and others seem likely to follow suit. These actions should provide positive income effects to go along with the price effects, which will further benefit U.S. exports. Compared to the 4.8 percent growth of our real exports during the past year, we are assuming real export growth averaging 7½ percent per year over the next two years.

A few weeks ago, Japan cut its discount rate from 3.5 to 3 percent as part of a series of steps to stimulate Japanese economic growth. We are assuming that West Germany and other major European economies will follow suit with more stimulative monetary policies in early 1987—the delay representing an apparent desire on the part of the West Germans to hold off until after their own elections. If the Fed fails to follow with lower interest rates here, part of the stimulus to the Japanese and West German economies will derive from a decline of their interest rates *relative* to ours, which will depreciate their currencies and further stimulate their bilateral net export surpluses with us. We are therefore asusming that the Fed will sterilize that aspect of the monetary stimulus policies of our trading partners and follow the others with a reduction in the U.S. discount rate at the beginning of 1987. Since we are hardly likely to be in an inflationary boom at that time, such Fed action will also be consistent with the overall state of the domestic economy.

For the past year and a half, the Fed has been providing the economy with substantial liquidity by allowing the monetary base to grow at annual rates in the range of 8-10 percent. As overall economic prospects begin to improve, we expect the Fed to back off to a more sustainable base growth of 5 percent.

Inputs: Fiscal Policy and Other Items

We turn now to another critically important dimension of our input assumptions—the federal budget and the newly passed tax reform package.

The Congress has passed a spare fiscal 1987 expenditure budget that holds overall nondefense spending at its fiscal

1986 level and increases defense spending by 3 percent, for a total budget increase of under one percent. The official fiscal 1987 deficit estimate is $151 billion. Sequestration is thus avoided by coming within $10 billion of the Gramm-Rudman-Hollings deficit target of $144 billion.

To come within $10 billion of the deficit target the Congress did reduce appropriation levels relative to what the president had requested. But a number of accounting gimmicks were used as well, such as moving the date of military paychecks one day, which moves one paycheck into the next fiscal year and thereby saves $2.9 billion – but only for fiscal 1987. In addition projected asset sales account for $8 billion of deficit reduction for fiscal 1987, and more than $11 billion comes from a first year windfall from tax reform. In fiscal 1988, tax reform is projected to *reduce* revenues by nearly $17 billion. The swing in tax revenues due to tax reform measures and the one-time-only nature of the savings from asset sales and accounting gimmicks push achievement of the fiscal 1988 deficit reduction target further out of reach.

We project that defense spending, spending on farm programs, and growth in entitlement programs will actually be slightly higher than is anticipated in the congressional budget, with the result that total federal government expenditures will be 2.5 percent higher in fiscal 1987 than in fiscal 1986 (see Table 2). In the context of our forecast, which includes the early revenue gains projected to result from the tax reform legislation but ignores a projected $3 billion revenue gain from increased compliance and higher penalties, we project a fiscal 1987 federal deficit of $173 billion. Our spending projections for fiscal 1988, which include a 5 percent increase in defense spending and no increase in other government purchases beyond pay increases, result in a fiscal 1988 deficit of $165 billion, far above the GRH target of $108 billion.

TABLE 2. Federal Government Expenditures and Receipts (National Income and Product Accounts, billions of dollars)

	Actual	RSQE Projections	
Expenditures, Receipts, and Deficit	**Fiscal 1986[1]**	**Fiscal 1987[2]**	**Fiscal 1988[2]**
Total Expenditures	1023.6	1049.7	1082.3
Purchases of Goods and Services	367.5	376.2	391.6
National Defense	272.4	287.4	301.8
Nondefense	95.0	88.8	89.8
Transfer Payments	392.4	411.6	419.9
Unemployment Benefits	16.0	17.8	17.8
Grants-in-aid to State and Local Governments	104.5	102.0	102.0
Net Interest Paid	135.8	137.6	146.6
Subsidies Less Current Surplus of Government Enterprises	23.4	22.3	22.3
Total Receipts	809.6[3]	876.4	917.6
Deficit (-)	-214.1	-173.2	-164.7

[1]Data for Fiscal 1986 are from the *Survey of Current Business*, October 1986.
[2]RSQE projections and Control Forecast for fiscal years 1986 and 1987.
[3]The receipts and deficit components for 1986:3 are RSQE projections.

The Tax Reform Act of 1986 was passed by the Congress in September. Key provisions of the act, which we have implemented in our forecast, include the following:

- reduction of individual and corporate tax rates and increases in standard deductions and in the personal exemption;
- repeal of the investment tax credit, retroactive to January 1, 1986;
- less favorable depreciation rules for real estate, autos, and many types of production and business equipment; and
- removal of tax preferences, revision of the alternative minimum tax provisions, and changes in accounting rules.

Table 3 presents a summary of the Conference Committee estimates of the revenue effects of the Tax Reform Act. As shown in the table, the act achieves tax revenue neutrality over the five year period, fiscal 1987 through fiscal 1991, on the basis of the estimated direct impact effects. However, the direct revenue effect is positive in the last two fiscal years, when provisions have been fully phased in, resulting in a slightly higher level of future taxes for succeeding years.

Most of the effects of the tax reform on corporations, except for the reduction in the corporate tax rate from 46 to 34 percent, will be fully in effect by the start of calendar 1987, and these amount to a corporate tax increase of more than $40 billion annually. The reduction in the corporate tax rate becomes effective in mid-1987 and reduces the corporate tax increase to about $25 billion at annual rate thereafter. The net effect of the tax reform on aggregate personal taxes is ultimately a tax cut of some $15 billion per year. But as various provisions are phased in and various tax preferences are phased out, the personal tax effects amount to a tax cut of $19 billion at annual rate effective January 1, 1987, and another $30 billion cut on top of that effective January 1, 1988. It's not until 1990 that the effective personal tax cut falls back to its permanent level.

The final major input condition to be discussed involves the state of world oil prices. The extreme developments of the past 12-15 months began with Saudi Arabia increasing its oil production sharply – a doubling between August 1985 and February 1986 – and setting in motion a dramatic decline in crude oil prices. The Saudis had hoped to find a lower price that would

- stimulate oil consumption world-wide,
- undercut some higher-cost non-OPEC production,
- expand the OPEC share of the total market, and
- permit Saudi production to remain above the very low level to which it had earlier been driven in support of the old $30 per barrel price.

The Saudi output increase, coupled with production level increases by several other OPEC members, increased OPEC oil production to 18 million barrels per day for the first six months of 1986 from under 16 million during the first six months of 1985. In the face of constant non-OPEC supply and only modest increases in demand, crude oil prices were halved between the fourth quarter of 1985 and the second quarter of 1986. During July, the Saudis and other OPEC members raised production still further, which brought total OPEC production to 20.5 million barrels per day. Spot market prices fell below $10 per barrel in July, and finally resulted in efforts to reach a production limitation agreement. On August 4th OPEC members agreed to reduce their production levels by nearly 4 million barrels per day during September and October, ending the July slide in world oil

TABLE 3. Direct Effects of Tax Reform Legislation on Federal Revenues,[1]
Fiscal Years 1987-1991 (billions of dollars)

Source of Tax Effects	1987	1988	1989	1990	1991	5 Year Total
Corporate Taxes						
Effects Due To						
Tax Rate Reduction	−6.7	−20.1	−27.5	−30.0	−32.4	−116.7
Minimum Tax Revision	+3.1	+5.4	+5.1	+4.5	+4.2	+22.2
Repeal of Investment Tax Credit	+18.8	+21.0	+25.1	+25.6	+28.1	+118.7
Depreciation Revisions	−3.3	−2.8	+0.2	+4.4	+9.2	+7.7
Accounting and Other Changes	+13.3	+20.4	+19.6	+18.9	+16.1	+88.4
Total Corporate Tax Revenue	+25.2	+23.9	+22.5	+23.4	+25.2	+120.3
Personal Taxes						
Effects Due To						
Tax Rate Reduction and Effects Relating to Capital Gains	−16.9	−56.8	−53.7	−39.0	−40.6	−207.1
Standard Deduction Increase	−1.1	−6.2	−8.3	−8.9	−9.5	−33.9
Personal Exemption Increase	−13.4	−26.3	−26.5	−27.7	−28.9	−122.8
Other Changes	+17.4	+48.3	+50.6	+60.0	+65.5	+241.9
Total Personal Tax Revenue	−14.0	−41.0	−37.9	−15.6	−13.5	−121.9
Other Provisions (net)	+0.2	+0.4	+0.3	+0.3	+0.3	+1.3
Net Federal Revenue Effects	+11.4	−16.7	−15.1	+8.1	+12.0	−0.3

[1]Conference Report on H.R. 3838, Tax Reform Act of 1986, *Congressional Record*, vol. 132, no. 123, part 2, pp. H7826-H7831.

prices. However, excessive inventories of oil resulting from OPEC's production spree prevented prices from rebounding immediately. Within two months of that agreement, however, oil prices returned to the $14-15 per barrel range on both spot and (short) futures markets. The firing of Saudi oil minister Sheik Yamani appears to have signalled an end to the strategy which produced extreme volatility in the oil market.

We now expect that the continuation of current OPEC production agreements will result in crude oil prices climbing back up to $16 per barrel after the early months of 1987. Thereafter, we anticipate that oil prices will rise in line with the general rate of inflation at about 4 percent per year.

Based on the information in press coverage of the economics of the U.S. oil industry, it appears that approximate stability of oil prices in the range of $15-16 per barrel will halt the slide in domestic oil field activity. Once that has occurred, the nation as a whole will be the net beneficiary of what will have been nearly a 50 percent cut in oil prices between 1985 and 1987.

We turn now to the overall economic outlook which derives from processing our input assumptions and recent economic conditions through the Michigan Model.

Overview of the Forecast

The major features of our forecast are summarized, on a calendar year basis, in Chart 2. We are forecasting that this year's 2.6 percent increase in total national output—real GNP—will be followed by an increase of 3.3 percent for calendar 1987. Further, with the second phase of the drop in personal income taxes under the tax reform going into effect in January 1988, and with our real trade balance holding about constant, our forecast implies a continuation of the current expansion into 1988 with real GNP growth of 3.2 percent for the year.

Accompanying continued yearly expansion at average rates in excess of 3 percent is a pattern of further annual reductions in the rate of unemployment. We expect small reductions in the unemployment rate, resulting in an average level of 6.9 percent for 1987 and 6.7 percent for 1988.

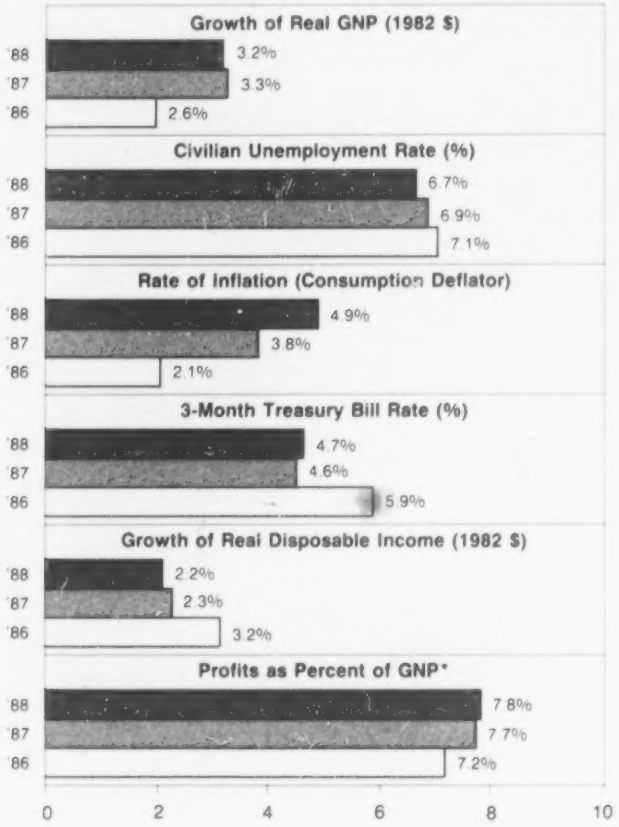
Consumer prices were held down during 1986 by the dramatic decline in oil prices and a very small increase in nonoil import prices. With a return to stability in world oil markets and acceleration in nonoil import prices, we are forecasting that the personal consumption deflator will be 3.8 percent higher in 1987 than in 1986 and another 4.9 percent higher in 1988. The growth of real disposable income—reflecting the opposing influences of higher prices and the net personal income tax cut—is forecast to fall back to a little over 2 percent annually in 1987 and 1988. Profits, including inventory valuation and capital consumption adjustments, are expected to increase to 7.8 percent of GNP after hovering at just above 7 percent since 1984.

As shown in the fourth panel of chart 2, we are forecasting that short term interest rates will be down in 1987, averaging 130 basis points less than in 1986, but will move up slightly in 1988.

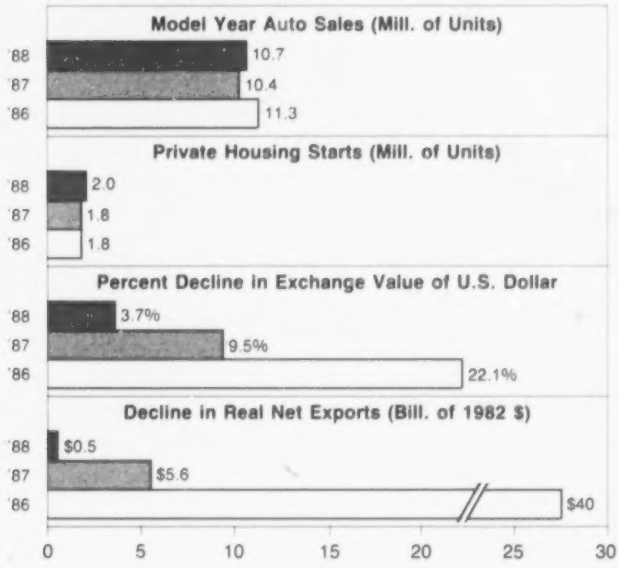
Following two years of near record auto sales, the auto market is forecast to display solid but not record strength over the next two years, with sales of 10.4 million units in the 1987 model year and 10.7 million in the 1988 model year. The combination of modest improvement in unemployment, output growth averaging over 3 percent, and mortgage rates continuing to edge down over the next year implies continued strength in the housing market. We forecast that private housing starts will continue during 1987 at this year's average level of 1.84 million units and will increase to 1.97 million units for 1988.

The trade-weighted value of the dollar declined by 22.2 percent between 1985 and 1986. For 1987 we expect a 9.5 percent decline, which is then followed by a 3.7 percent decline for 1988. When the dollar price of our nonoil imports changed little between 1985 and 1986 while oil prices collapsed, our real net exports declined by another $40 billion.

CHART 2. Overview of RSQE Forecast for 1987-88



*Includes inventory valuation and capital consumption adjustments



With the expected upturn in the dollar price of our nonoil imports and with stability in world oil markets, we are forecasting minimal further deterioration in real net exports, amounting to $5.6 billion for 1987. We expect real net exports to hold virtually constant for 1988.

The Dynamic Path in the Forecast

Charts 3-8 display the major dynamic developments over our nine quarter horizon ending with the fourth quarter of 1988. As shown in Chart 3, we are expecting that the rate of growth of real GNP will average a bit over 4 percent during the first half of next year and about 3½ percent during the second half of next year. The growth rate continues to edge downward during 1988, averaging just over 3 percent in the first half and just under 2½ percent in the second half of the year. This path of production is accompanied by a path for the civilian unemployment rate (see Chart 4) which starts at 7 percent in early 1987, drifts down to 6.7 percent a year later, and then manages to remain at just about that level for the balance of 1988. Meager as that progress might seem to be, a year of unemployment at about 6.7 percent would be the best this economy has been able to do since 1979. One has to wonder, therefore, what kind of inflationary pressure will be generated in that state of the labor market.

Chart 5 provides some guidance in this regard. We identify three potentially important sources of price pressure: the behavior of oil prices, represented by the CPI component for gasoline and motor oil products; the behavior of nonoil import prices; and unit labor cost in the private nonfarm sector of the economy. The first two account for

CHART 3. Annual Rate of Growth of Real GNP (1982 Dollars)

Percent Change

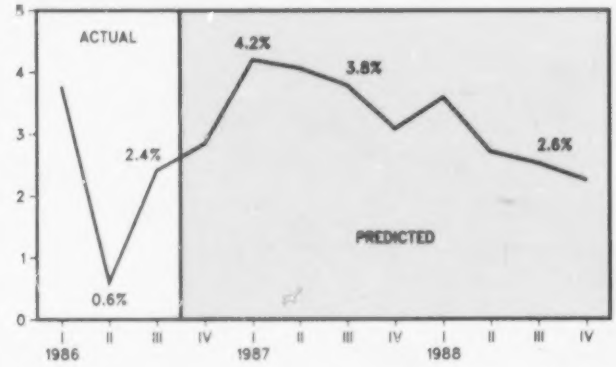


CHART 4. Civilian Unemployment Rate

Percent

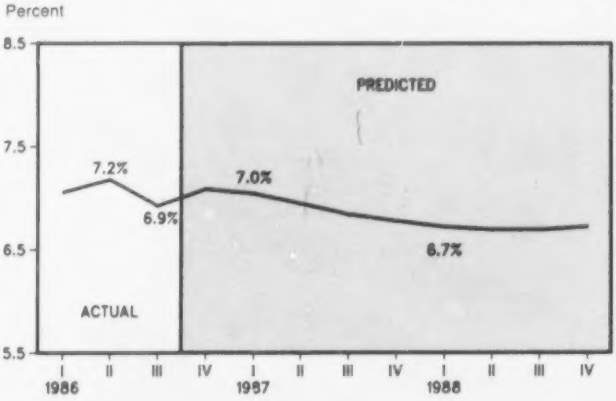


CHART 5. Relative Prices

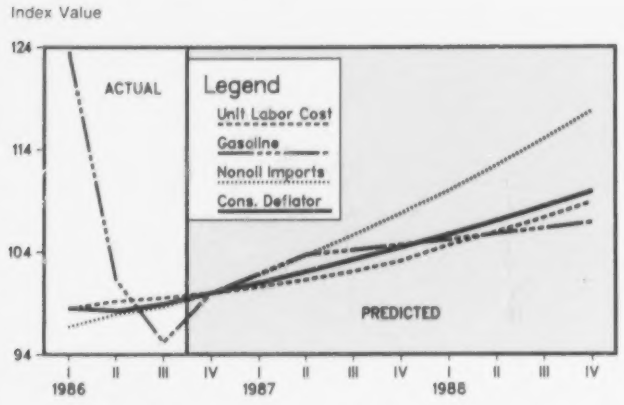
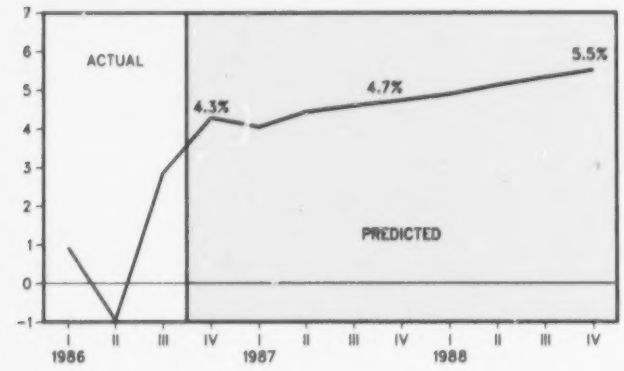


CHART 6. Inflation (Change in Consumption Deflator)



special factors which are particularly important for the near term, while the third, unit labor cost, is important for the assessment of core industrial inflation. The chart also includes the personal consumption deflator, which embodies the overall effect of these separate factors. The message is as follows:

- The jump in the price of gasoline and oil products as crude oil prices attain the $16 per barrel level will not exert much pressure on the overall price level.
- Nonoil import inflation, on the other hand, will be pulling up the level of consumer prices—and even more so in 1988 than in 1987. This is a cost that simply must be borne if we are going to succeed in strengthening domestic production.
- Finally, there is a clear indication that unit labor cost will be accelerating as we go through the next two years. As the labor market tightens—even to the extent implied by the small drop in unemployment contained in our forecast—wage inflation will begin to outrun productivity growth by a wider margin.

What all this will mean for the inflation rate over the next two years is shown in Chart 6. While there was no overall inflation in consumer prices during the first half of this year when oil prices were plummeting and nonoil import prices were just beginning to move up, the situation is quite different now. We are expecting consumer price inflation to average 3½ percent (at annual rate) during the second half of this year, followed by 4½ percent during next year, and 5.2 percent during 1988. These prospective increases in the rate of inflation—and the underlying path of unit labor cost—are a source of some concern about what our goals should be regarding the desirable path of production and employment as we begin to contemplate developments beyond the next two years.

The path of interest rates is shown in Chart 7. The 3-month treasury bill rate, representative of short term rates in general, is forecast to decline early next year—largely in response to our assumption that the Fed will drop the discount rate another 50 basis points—and bottoms out at just over 4½ percent in the second quarter of 1987. It remains at that level for the balance of 1987 and edges upward during the following year. On the other hand, the corporate Aaa rate continues down over most of the next 2 years, stabilizing at about 7¾ percent in the second half of 1988, compared with 8.8-8.9 percent in the second half of this year. A triple-A rate at or just below 8 percent would be the lowest we've seen since 1977.

One obvious question to ask is whether to be surprised that the economy's growth rate is forecast to be moving down to the range of 2-2½ percent by the end of 1988. If we approach the matter from the supply side, it is not particularly surprising. The underlying demographics imply that the population

CHART 7. Interest Rates

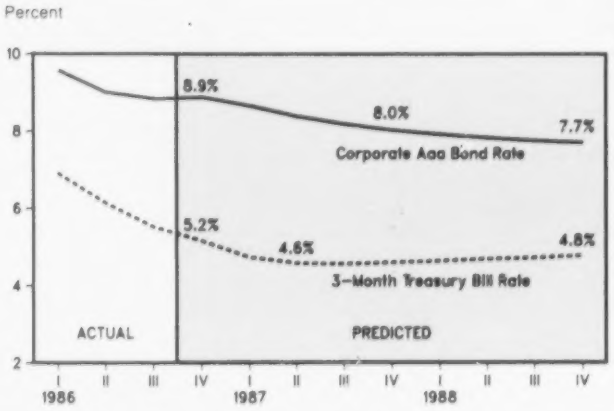
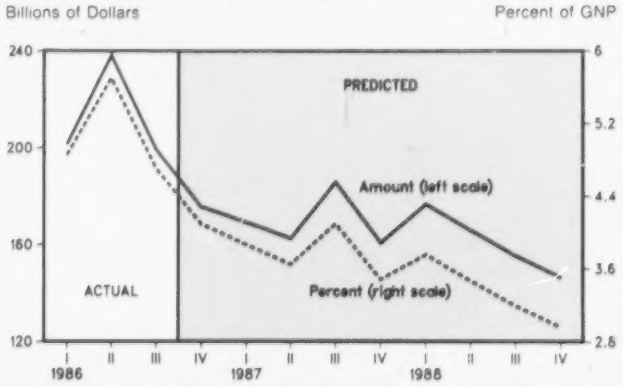


CHART 8. Federal Government Deficit (NIPA Basis): Amount and Percent of GNP



aged 16 and over will be growing at a rate of at most one percent per year in the mid-to-late 1980s, and further growth in the labor force participation rate is unlikely to pull the growth of the labor force much above one percent. Recent evidence implies not much more than another one percent as a realistic expectation of short term productivity growth. Two to 2½ percent thus seems about right for a first pass at the expected rate of growth of output. To go much above that requires some combination of events on the demand side which would induce us to employ more of the unemployed or add to the growth of productivity, at least in the short run. A really fundamental improvement in our net export position could do that, but that is not in our forecast for the next two years. A speedup in inventory accumulation would do so – even if only temporarily – and that happens in our forecast during 1987, but not again in 1988. The growth of government purchases also slows down in our 1988 forecast, reflecting our hold-the-line budget assumptions. And finally, higher inflation tends to put the brakes on economic growth, especially if the Fed refuses to accommodate more inflation with higher growth of the monetary base, which is exactly what we have assumed.

To close this summary of economic developments, we consider Chart 8, which shows the path of the federal deficit over the next two years. The spare expenditure budgets which we have assumed, the continuation of low interest rates, and reasonable economic growth all combine to put the federal deficit on a generally declining path. The deficit jumps temporarily in two quarters: the third quarter of 1987 when the 34 percent corporate tax rate becomes effective, and then again in the first quarter of 1988 when more of the personal tax cut is phased in. The deficit path in our forecast implies a substantial drop in the deficit as a percent of GNP, from an uncomfortably high 4.7 percent in 1986:3 to 3 percent by the end of 1988.

Table 4 displays the 1987-88 RSQE forecast in substantial additional detail.

Conclusions

A year ago, when Gramm-Rudman-Hollings had not yet become law but looked very much like it might, we made some very negative comments about forcing such a rigid procedure for deficit reduction on the economy. One of the few justifications we could come up with was that "One really unpleasant experience with its requirements may be the only way to raise an overwhelming public sentiment for phasing in a series of tax increases which will do the trick gradually, and yet be naturally responsive to the state of the economy." Nonetheless, we wound up labelling it a "dangerous experiment." It appears that the federal bureaucracy is at least as smart as we were. It has apparently been decided that it would be in the best interests of the economy and all concerned to avoid even "one really unpleasant experience" and simply *pretend* that the letter of the law is being satisfied. We doubt that any serious analyst really believes that the fiscal 1987 deficit will come in at the official $151 billion or that it's even feasible to come close to the $108 billion target for fiscal 1988 without doing severe damage to the economy. Since we never believed that rigid deficit targets were justifiable, we are not concerned about missing them. What *is* important, however, is that we shrink the deficit – slowly but surely in dollar terms and more rapidly, therefore, relative to the level of GNP. That does indeed happen in our forecast, but our forecast contains very spare expenditure budgets – just slightly more generous than the kind the Congress talks about, passes at the start of the fiscal year, and fails to meet by the end of the year.

If we cannot manage – because few of us really want it – to produce expenditure budgets which rise by no more than 3 percent per year, we're simply not going to succeed in containing the deficit and the growth of interest payments in the federal budget without turning to higher taxes. Perhaps the new Congress – with both houses now under Democratic control – will undertake a more serious consideration of the need for higher taxes than was possible when the Senate leadership was of the president's party. And if such a move takes the form of a consumption-based expenditure tax – thereby leaving the new tax reform bill untouched – might it not even be possible to win grudging support from the president?

As a matter of fact, however, one might even argue that a further tax reform is needed. The president wanted to lower the top personal income tax brackets and cut corporate tax rates. To do that while also maintaining revenue neutrality required more than the elimination of tax preferences, i.e., the closing of tax loopholes. It also necessitated reducing tax incentives for business capital investment by eliminating the investment tax credit and lowering depreciation rates. The United States is already suffering from miserable productivity performance. We're having a hard time improving our international competitiveness, and we are apt to begin generating inflationary pressures at an unemployment rate too high to be socially acceptable. We've gone 6½ years with unemployment well above 6½ percent, and we might even make it a decade. What sense does it make to have raised the marginal cost of capital investment? We ought to be using the tax system to indicate a social preference for modernization of the capital stock, for research and development, for entrepreneurial risk-taking; not for personal consumption expenditures. A consumption-based expenditure tax may be the right vehicle at the right time to attack the budget deficit and complete the process of tax reform in a socially sensible way. *November 1986*

Summary of the February 1987 Forecast Update

Despite the preliminary estimate that the economy grew at a rate of only 1.7 percent in the closing quarter of 1986, current signals are largely positive and point to a stronger first quarter:

- healthy employment gains continuing into January,
- manufacturing production firming up steadily since mid-1986,
- an improving export outlook and imports slowing down,
- the Index of Leading Indicators posting a gain of 2.1 percent in December, and the National Association of Purchasing Management recording a jump in its index of business activity in January to its highest value since July 1984.

Some of these signals may be overly bullish, especially to the extent that they reflect a few special year-end factors such as the tax- and incentive-induced surge in car sales in December, but they are impressively positive. And they constitute corroborating evidence for the pretty solid first quarter generated by the Michigan Model of the U.S. economy.

We are forecasting that real GNP growth will come in at a bit over 3 percent (annual rate) this quarter. Although car sales will be sharply lower after the recent buy-ahead surges,

TABLE 4. Selected Economic Indicators as Forecast by RSQE, November 1986

Seasonally adjusted data, billions of current dollars unless otherwise indicated

	Quarterly Data										Annual Data			
	ACT.	PROJECTED									PROJECTED			
ECONOMIC INDICATORS	86:3	86:4	87:1	87:2	87:3	87:4	88:1	88:2	88:3	88:4	1987	1988	% Changes 86-87	87-88
GROSS NATIONAL PRODUCT	4,234	4,291	4,374	4,454	4,535	4,613	4,704	4,785	4,867	4,950	4,494	4,826	6.68	7.40
PERSONAL CONSUMPTION EXPENDITURES	2,799	2,811	2,875	2,928	2,983	3,036	3,101	3,160	3,220	3,280	2,955	3,190	7.08	7.94
DURABLE GOODS	410.2	381.8	398.3	406.2	414.0	419.6	427.4	434.0	439.9	445.4	409.5	436.7	7.30	6.63
AUTOMOBILES and PARTS	200.9	167.9	179.8	184.2	188.7	191.4	195.5	199.1	201.9	204.3	186.1	200.2	5.66	7.61
FURNITURE and H.H. EQUIPMENT	140.4	143.1	145.8	148.1	150.0	151.7	153.7	155.4	157.2	158.9	148.9	156.3	8.02	4.95
OTHER DURABLES	68.9	70.8	72.7	73.9	75.2	76.4	78.2	79.5	80.8	82.2	74.6	80.2	10.09	7.50
NONDURABLE GOODS	935.5	952.2	970.9	987.1	1,003	1,017	1,036	1,052	1,068	1,085	994.5	1,060	6.20	6.63
SERVICES	1,454	1,477	1,506	1,534	1,566	1,599	1,638	1,674	1,711	1,750	1,551	1,693	7.59	9.13
GROSS PRIVATE DOMESTIC INVESTMENT	674.7	707.5	723.4	749.3	772.1	797.2	817.6	837.2	855.6	872.2	750.5	845.7	9.51	11.20
NONRESIDENTIAL	461.1	452.1	459.8	466.7	476.5	486.8	497.0	507.5	518.1	528.3	472.4	512.7	3.27	8.53
RESIDENTIAL STRUCTURES	221.1	226.6	233.0	242.8	255.6	266.5	276.4	285.4	294.3	302.5	249.5	289.7	14.93	16.11
CHANGE in BUSINESS INVENTORIES	-7.5	28.8	30.6	39.8	40.0	43.8	44.2	44.3	43.2	41.4	38.6	43.3	--	--
NET EXPORTS	-110	-111	-123	-133	-141	-152	-161	-169	-176	-180	-137	-172	--	--
EXPORTS	373.5	383.8	392.1	403.1	414.6	425.5	437.0	449.9	463.4	477.7	408.8	457.0	9.38	11.78
IMPORTS	483.7	494.8	515.4	535.8	555.7	577.1	598.5	619.0	638.9	658.1	546.0	628.6	14.07	15.14
GOVERNMENT PURCHASES	870.5	882.8	898.8	909.8	920.8	931.3	946.0	956.7	967.6	978.5	915.1	962.2	6.08	5.14
FEDERAL	365.8	368.3	375.5	378.8	382.0	384.6	391.3	393.9	396.5	399.0	380.2	395.2	4.36	3.93
NATIONAL DEFENSE	277.0	280.3	286.5	289.8	293.0	295.6	301.3	303.9	306.5	309.0	291.2	305.2	5.70	4.79
NONDEFENSE	88.8	88.0	89.0	89.0	89.0	89.0	90.0	90.0	90.0	90.0	89.0	90.0	0.20	1.12
STATE and LOCAL	504.7	514.5	523.3	531.0	538.8	546.7	554.7	562.8	571.1	579.5	534.9	567.0	7.34	6.00
GROSS NATIONAL PRODUCT DEFLATOR, 1982 = 100	115.0	115.7	116.7	117.7	118.7	119.8	121.1	122.4	123.7	125.1	118.2	123.1	3.22	4.11
REAL GROSS NATIONAL PRODUCT (billions of 1982 dollars)	3,683	3,709	3,748	3,785	3,820	3,850	3,884	3,910	3,934	3,956	3,801	3,921	3.35	3.16
CIVILIAN UNEMPLOYMENT RATE (percent)	6.93	7.09	7.04	6.95	6.84	6.78	6.72	6.69	6.69	6.72	6.90	6.71	--	--
CORPORATE PROFITS plus IVA and CCA	302.9	313.6	329.0	344.4	355.7	364.7	370.0	376.4	380.2	383.8	348.5	377.6	15.57	8.35
3-MONTH TREASURY BILL RATE (%)	5.52	5.16	4.73	4.58	4.56	4.60	4.64	4.69	4.72	4.78	4.61	4.71	--	--

and business investment activity will be flat overall,

- real non-auto consumption is forecast to be up at a 2.6 percent annual rate in 1987:1;
- residential building activity is forecast to post a gain of 5 percent at annual rate;
- real exports are forecast to rise to $394 billion ('82 dollars) compared with $371 billion in 1986:3 and $385 billion in 1986:4, while real non-oil imports hold flat and oil imports dip in 1987:1; and
- inventory investment swings from a negative in 1986:4 to about zero in 1987:1.

After the early months of this year, the pace of car sales will begin to pick up again, and investment in producers durable equipment will begin to rise in response to the overall strengthening of demand for domestic output.

We are anticipating that real GNP will post a gain of 4½ percent at annual rate in the spring quarter of the year and that unemployment will be edging lower as production speeds up. We peg the mid-year civilian unemployment rate at about 6½ percent.

Given the rapid depreciation of the U.S. dollar during the past two months, we no longer anticipate any near-term drop in the Fed's discount rate. The Fed can be expected to wait out the positive effects of its recent easing of monetary policy, but not to contribute much further economic stimulus in the coming months. The dollar is expected to edge downward over the forecast horizon, but further sharp declines are unlikely.

Economic growth is forecast to average 4½ percent during the second half of this year as our real net export position continues to improve. Other leading sectors in the second half of this year include:

- residential building, with mortgage rates remaining stable;
- business fixed investment, as producers durables gain strength and nonresidential building begins to edge up; and
- non-auto inventory accumulation, following two years of slow growth in response to weak demand for domestic output.

Economic growth is forecast to continue through 1988 with real GNP rising by 3 percent from 1987:4 to 1988:4 and the civilian unemployment rate closing 1988 at about 6.2 percent.

An increasing rate of inflation is forecast to accompany the strengthening of the domestic economy during the next two years. As measured by the consumption deflator, consumer prices will rise by nearly 5 percent during this year and by 6 percent during 1988.

This acceleration of the rate of inflation is the inevitable consequence of a tightening of the labor market and a rise of dollar denominated non-oil import prices amounting to 15 percent and 10 percent during 1987 and '88, respectively.

Foreign Trade Improvement to Boost the Economy

Paul W. McCracken
Edmund Ezra Day Distinguished University Professor Emeritus
of Business Administration, Economics, and Public Policy
The University of Michigan

An Economy Out of Joint?

The contemporary economic scene is enough to persuade practitioners (in Carlyle's words, "the Respectable Professors of the Dismal Science") that we have on our hands a non-Euclidean economy – one where metaphorically parallel lines cross, a straight line is the longest distance between two points, and no two points on the circumference of a circle are the same distance from the center.

One "axiom" of economics has long been that large budget deficits cause inflation. Ask an economist about the inflation that got under way after 1965, and central to his explanation is apt to be the large government deficits from spending on the Viet Nam war. In fiscal year 1968 the deficit rose to $25 billion, equal to just under 3 percent of GNP. And what do we see now? In the 1980s we find ourselves with budget deficits exceeding $200 billion, 5-6 percent of GNP, and the price level behaves with impeccable benignity.

The money supply, we finally all learned, blazed the trail along which the economy generally would move later. The money supply (M-1) in 1986 rose at an inflationary 16 percent rate, following an inflationary 12 percent rate in 1985, and our major concern is why the economy is so sluggish. That is not the textbook response of the economy to 12-15 percent rates of monetary expansion.

As often happens, things appear more logical when we begin to dig a little deeper. And there are some things to say about the economy as we look down the 1987 road. Most seers agree that a downturn, a recession, does not seem to be in the cards for 1987. Leading indicators, which are often auguries of economic things to come, do not point in that direction. Nor does any sort of collision between tight monetary policy and overly heavy inventories (which was a central cause of the recessions of 1974-75, 1957-58, and the all-time classic case of 1920-21) yet seem to be shaping up.

External Trade—the Key to 1987

Central to 1987 projections for the economy is the assumption made about what will happen to our balance of payments. Capital outlays of businesses do not look like any locomotive for the economy this year. Consumers do take seriously their responsibility to promote prosperity by themselves living better, and they will probably discharge that responsibility again in 1987 – but they will merely do their part. While this is the season for screams of agony from interest groups, who intimate that Federal spending is being collapsed, in fact government will spend more this year than in 1986 – but not dramatically more. And businesses are certainly not going to maintain production above sales, adding a lot to unsold inventories.

If there is to be a locomotive for the economy this year, it almost has to come from a turnabout in our external trade. Something like a $30-40 billion improvement in our trade position is a frequent projection. This would still leave us with a trade deficit well over $100 billion, but a $30 billion improvement is far better than a $30 billion further deterioration (as happened in 1986). If this improvement were to occur, output might rise 3 percent, gains in employment would about equal the growth of the labor force, and the price level ought not to drift up by more than about 3 percent. If this all were to be realized, 1987 would go into the history books as a solid but certainly not a spectacular year for the economy.

Recent Trends in Exports and Imports

The key is whether that favorable turnabout in trade will occur. There is clearly a growing amount of pessimism. For one thing the promised improvement in our trade, following the decline in the dollar's exchange rate beginning two years ago, simply has not seemed to be emerging. U.S. exports in 1986 were about equal to the volume, in real terms, two years earlier, though GNP during that period increased more than 5 percent (again, in real terms). And during those two years the volume of imports increased almost 20 percent. Further, our trade in manufactured products, which registered a surplus of $18.8 billion as recently as 1980, showed an excess of these imports over exports in 1986 that exceeded $130 billion (see Table 1).

TABLE 1. U.S. Exports and Imports, 1980-86
(billions of dollars)

	Exports		Imports		Trade Surplus	
Year	Total	Manufactured	Total	Manufactured	Total	Manufactured
1980	$216.5	$143.9	$244.9	$125.1	$-28.4	$18.8
1981	228.9	154.3	261.0	142.5	-32.1	11.8
1982	207.1	139.7	244.0	144.0	-36.9	-4.3
1983	195.9	132.4	258.0	163.4	-62.1	-31.0
1984	212.0	143.1	325.7	221.5	-113.7	-78.4
1985	206.9	145.4	345.3	246.8	-138.4	-101.4
1986*	205.0	148.0	365.0	280.0	-16.0	-132.0

*Estimates based on incomplete data.
Source: *Economic Indicators*, December 1986, p. 35.

There is growing concern about the extent to which our trade deterioration may reflect structural maladjustments here and in the world economy and may not therefore respond well to the better balance in exchange rates. While our exports to Canada and Japan – our two most important trading partners – have at least increased during the 1980s, exports to developing countries (for example, Mexico) were lower in 1986 than in 1980 (see Table 2). And the developing countries are for us an important export market; at the beginning of the decade they accounted for almost 40 percent of our total exports. These countries have, of course, been affected by an array of adverse developments. Prices of raw materials have been weak, and these items loom large in their exports. Debt service requirements pre-empt a large chunk of their own export earnings – for example, for Mexico just under 50 percent in 1984; for Egypt, 34 percent; and for Chile, well over 50 percent. When it comes to outside debts nations are much like families or businesses. Heavy debts have a priority claim on funds and force belt tightening for current buying of products.

Traditionally agricultural products have been important in U.S. exports (about 20 percent of total exports at the beginning of the decade), and these exports are down about 40 percent from levels prevailing around 1980. While the over-valued dollar played an important role in squeezing our farm products out of world markets, there were other factors. Some nations with a long history of inability to produce grain up to domestic needs have achieved self-sufficiency – for example, India and China. The European Economic Community's costly agricultural program has produced Gargantuan surpluses which the EEC periodically moves into world trade in ways that disrupt markets. (Indeed, the EEC's increasingly inward orientation is another force tending toward a fragmentation of the world economy.)

The locomotive on which we place heavy reliance for the propulsion to generate economic expansion in 1987 seems, in short, to be an engine of uncertain dependability and power. Are the structural or inherent impediments to a favorable turnabout in our external trade going to stall such improvement? If so the prospects for employment and production here at home are bleak.

Reasons for Optimism about Trade

In fact, we should lean in the optimistic direction as we evaluate our prospects for trade, for two sets of reasons. History warns us to be wary of predictions that the economy has lost its capability to adjust because of structural problems. In the 1950s, only three decades ago, there was serious concern about whether Western Europe and Japan could ever compete for world markets against the industrial behemoth in North America. We now know the answer. In the 1960s there was fear that for structural reasons the high unemployment rate could not be brought down. A more vigorous economy brought it down, and with little adverse effect on the price level until the rise in Viet Nam defense spending. In the 1970s we wondered if for structural reasons the accelerating inflation could be brought under control. With decisive disinflationary policies it could be, and it was. When, therefore, in the 1980s we hear that for structural reasons our trade position may not improve, we are probably entitled to say: "It seems to me I have heard this before."

TABLE 2. Destination of U.S. Exports, 1980 and 1986 (dollar amounts in billions)

Area	1980	1986*	Percent Change
Canada	$35.4	$45.0	+27.1
Japan	20.8	27.0	+29.8
Mexico	15.1	12.0	−20.5
U.K.	12.7	11.0	−13.4
W. Germany	11.0	10.0	−9.1
Other	125.8	110.0	−12.6
Total	$220.8	$215.0	−2.6

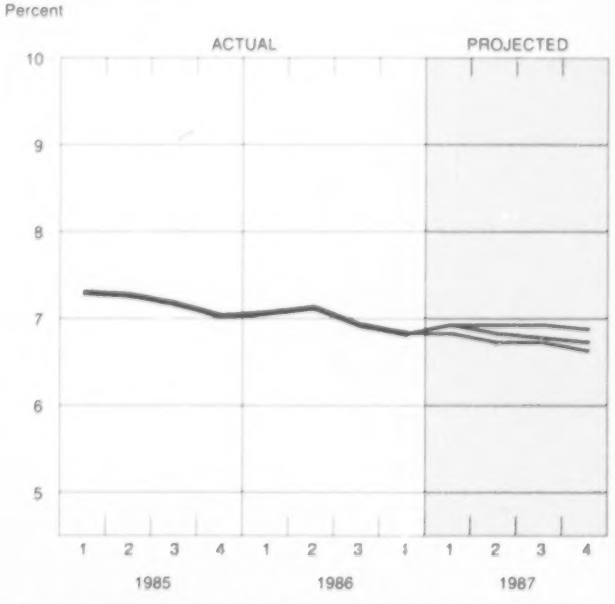
*Estimate based on incomplete data.

Source: *Statistical Abstract of the United States*, 1986, pp. 810-12 and *Survey of Current Business*, November 1986, pp. 516-7. (These data are on a different basis than those in Table 1.)

Moreover, some evidence is already suggesting a turn for the better. There are reports of companies that, with a better exchange rate alignment for the dollar, find themselves once again competitors. Indeed, by the latter part of last year there was some evidence that the long decline in U.S. exports was being reversed.

History suggests the wisdom of placing our bets on economic fundamentals, and that is probably good advice again this time. *January 1987*

UNEMPLOYMENT RATE



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

The Discount Waiting Game

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Confidence Maintained Amid Offsetting Trends

In the fourth quarter 1986 survey, the Index of Consumer Sentiment was 92.0, between the 94.8 recorded one quarter earlier and the 91.1 recorded one year earlier. Since the spring of 1983, the Index has remained in the relatively narrow range of 91.1 to 99.5, and has averaged 94.4. This represents the longest sustained period of consumer confidence recorded since the mid-1960s (see the chart below). The continued maintenance of sentiment at high levels, however, has been due to offsetting trends. As the expansion period has lengthened, expectations for improvement in the economy have dwindled, but have been offset by continued gains in evaluations of current economic conditions (see the first chart on page 21).

New Consumer Era

While such a divergence in sentiment trends is not unique to the current expansion, the reasons underlying it are distinctive and signify an underlying change in the structure of consumer attitudes and expectations. The most remarkable aspect of this long expansion is that consumers' assessments have remained favorable despite the expectation of little if any real improvement in their own financial situation or in the overall economy. In an earlier era, the expectation of a stagnant economy would have been a serious cause for concern and would have resulted in a sharp loss in consumer confidence. Times change, and so do people's standards of comparison.

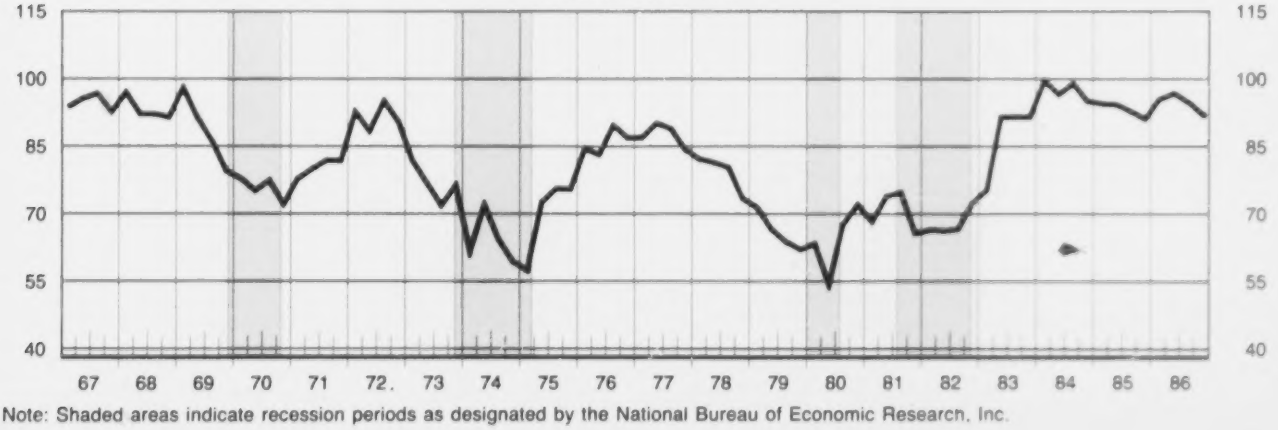
The decade of the 1980s began with a much changed perspective when compared with the 1970s. Following a long period of rapid and sustained economic growth in the 1950s and 1960s, the 1970s witnessed a prolonged series of economic adversities, amid widespread uncertainty and confusion. This situation was quite a departure from what many had experienced and had come to expect from the economy. This resulted in steep declines in sentiment and, because of the persistent sense of uncertainty, more volatile changes in attitudes and behavior.

In contrast, the performance of the economy in the 1980s follows a decade when many feared that double digit inflation, unemployment, and interest rates would become a permanent feature of the economy. That these concerns have not been confirmed has lessened these fears, but it has not led consumers to now expect a return to the prior high levels of economic performance. At present, assessments do not depend as much on whether the economy is meeting its potential for growth as on whether the economy can avoid the adversities of the past decade. Importantly, a renewed sense of stability in the economy—even if stagnant—has helped to insulate consumer attitudes from volatile changes.

Slower growth has not yet been viewed as a signal of an impending recession, as was often true in the past; and spending cutbacks are not now planned by consumers as a precaution against possible economic reversals. But because of the small improvements expected in their financial situation, consumers have placed more emphasis on the affordability of purchases, and thus on the availability of discounts on prices and interest rates. Indeed, consumers expect the sluggish economy to keep pressure on sellers to offer purchase incentives on prices and interest rates. Moreover, consumer reactions are likely to insure their continued availability, even though sellers have found these incentive programs to be an expensive means to promote sales. Consumers have now come to expect sellers to offer discounts, and they time their purchases to the availability of discounts. The withdrawal of discount programs is now met with sharp declines in sales, both because consumers have already sped up purchases to take advantage of discounts and because consumers are more willing to postpone purchases until there is renewed discounting. And thus the waiting game, as both buyers and sellers attempt to gauge the limits of each other's willingness to wait.

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

Favorable Financial Situation Expected to Remain Unchanged

Evaluations made by American families of their own financial progress have remained largely unchanged, at favorable levels, throughout the past three years. Among all families in the fourth quarter 1986 survey, 44 percent reported that their financial situation had improved, compared with 24 percent that reported that their financial situation had worsened during the past year. This represents a modest improvement over the year earlier reading (41 percent versus 27 percent) but is comparable to the two year earlier reading (44 percent versus 26 percent).

The recent increase in favorable evaluations was based on more frequent income increases and, more importantly, on lower rates of inflation. Among all families in the fourth quarter 1986 survey, 34 percent reported increases in family income during the past year, just above the 33 percent recorded one year earlier. Complaints about the erosion of purchasing power due to inflation were reported by just 10 percent of all families at year end 1986, the lowest proportion recorded since the mid-1960s.

An improved financial situation during the year ahead was expected by 35 percent of all families in the fourth quarter 1986 survey, just above the 34 percent recorded one year earlier but below the 38 percent recorded two years earlier. Half (52 percent) of all families in the fourth quarter survey expected their financial situation to remain unchanged during the year ahead, as has been true for most of the past two years. Importantly, just 10 percent of all families in the fourth quarter survey expected their financial situation to worsen, again largely unchanged during the past two years.

Although families somewhat more frequently expected income increases in the fourth quarter of 1986 than one year earlier (62 versus 59 percent), the size of the expected annual increase has remained small. Among all families, the median income increase expected was 3.4%, barely above the median expected annual rate of inflation of 3.1%. Given that consumers expected only a 0.3% improvement in real income, it is no surprise that so many thought that their overall financial situation would remain unchanged during the year ahead.

Income and Spending Trends

How do these favorable evaluations by consumers compare with long-term developments in their incomes? The average rate of growth from 1983 to 1986 in consumers' incomes marked the best four-year period during the past dozen years but nonetheless remains below the growth rates recorded in the 1960s. During the past four years, income growth has averaged 3.6%, which was slightly above the average recorded over the past quarter century. From 1961 to 1986, total real personal disposable income grew at an average annual rate of 3.4%. During the first half of this period, the growth rate was 4.4%, compared with just 2.4% during the last dozen years (see Table 1).

The growth rate in real personal consumption has also been at a high level during the past four years. From 1983 to 1986, the growth in real personal consumption expenditures averaged 4.3%, higher than the average of 3.5% for the entire past quarter century and significantly above the 2.8% average recorded during the past dozen years. Moreover, the growth rate in real personal consumption expenditures has been higher than the average growth in incomes during the past four years (4.3% versus 3.6%).

This reflects the much discussed decline in the personal saving rate. In 1986, the personal saving rate fell to 3.9%, the lowest level in more than a quarter century. This decline has resulted, not from lower levels of asset accumulation, but from the increased use of credit to finance consumer purchases of homes and vehicles. These improved sales have been propelled by record favorable buying attitudes, the topic to which we now turn.

Spending Paced by Discounts

Favorable attitudes toward market buying conditions for vehicles, homes, and household durable goods were held by more families during 1986 than in any prior year in the history of these surveys. Moreover, sales of vehicles and homes also posted record levels during 1986. By the close of 1986, however, favorable buying attitudes receded from the record peaks recorded earlier in the year. The overall slippage in favorable attitudes has been small for homes and household durables, while vehicle buying attitudes have declined to a somewhat greater extent in response to the ending of the last round of deep discounting by vehicle manufacturers.

TABLE 1. Changes in Income, Consumption, and Saving Rate

Year	Real Personal Disposable Income	Real Personal Consumption Expenditures	Personal Saving Rate
1961	2.9%	2.0%	6.6%
1962	4.2	4.3	6.6
1963	3.2	3.7	5.9
1964	6.9	5.6	7.0
1965	5.8	5.6	7.0
1966	4.8	5.1	6.8
1967	4.3	3.0	8.0
1968	3.9	5.1	7.0
1969	3.1	3.6	6.4
1970	4.3	2.4	8.1
1971	3.6	3.1	8.5
1972	4.0	5.4	7.3
1973	6.6	4.2	9.3
1974	-1.0	-0.9	9.3
1975	1.9	2.3	9.2
1976	3.6	5.4	7.7
1977	3.3	4.4	6.6
1978	4.9	4.1	7.1
1979	2.1	2.2	6.8
1980	0.1	-0.2	7.1
1981	1.6	1.2	7.5
1982	0.6	1.3	6.8
1983	3.1	4.7	5.4
1984	6.0	4.7	6.3
1985	2.3	3.5	5.1
1986	3.0	4.1	3.9
Means:			
1961-86	3.4%	3.5%	7.1%
1961-73	4.4	4.1	7.3
1974-86	2.4	2.8	6.8

Vehicles. Favorable attitudes toward buying conditions for vehicles were held by 66 percent of all families in the fourth quarter of 1986, down from the all-time peak of 76 percent recorded one year earlier. The most frequently cited reason for these very favorable attitudes has been the interest rate reductions offered by vehicle manufacturers. In the fourth quarter 1986 survey, 49 percent of all families cited reduced interest rates, down from 59 percent one quarter earlier but above the 39 percent recorded one year earlier. In addition, the ending of the deep discount programs also reduced favorable references to prices, although consumers continue to hold positive views of market prices for new vehicles. More consumers reported the availability of price discounts than complained about high prices in the fourth quarter 1986 survey (24 versus 15 percent). While reports of the availability of price discounts have been more frequent in the recent past, not since the mid-1960s have complaints about high prices been as infrequent.

The response of consumers to the presence or absence of interest rate discounts has been amply demonstrated in recent months. Sales of new cars and light trucks in the third quarter of 1986 reached a seasonally adjusted annual rate of 18.5 million units, the highest quarterly sales rate on record. This selling rate was significantly higher than the prior peak of 17.0 million units recorded in the third quarter of 1985, which was also prompted by interest rate discounts. But as with last year, when the discount programs ended, sales declined sharply. At annual rates, vehicle sales declined by about 2 million units from the third to the fourth quarter of both 1985 and 1986. Convinced that discounts will again be offered, consumers have been willing to time their purchases to the availability of discounts.

More cars and light trucks were sold in 1986 than in any prior year. Over the past decade, the cyclical peaks in sales of cars and light trucks have risen from 14.1 million vehicles in 1973, to 14.9 million in 1978, and to 16.3 million in 1986. Almost all of the increase was in sales of light trucks, which rose to an all-time high of 4.7 million units in 1986, from 3.7 million in 1978 and 2.7 million in 1973. In contrast, for cars the 1986 sales figure of 11.6 million units was only marginally above the 1973 peak of 11.4.

Homes. Favorable attitudes toward buying conditions for homes were held by 81 percent of all families in the fourth quarter 1986 survey, just below the all-time record of 85 percent recorded at mid-year. The very small recent decline was due to fewer mentions of reduced mortgage interest rates—falling to 74 from 82 percent. Nonetheless, perceptions of mortgage interest rates remain much more favorable than one or two years earlier and are the dominant factor behind favorable home-buying attitudes. Perceptions of market prices for homes were very favorable in the most recent survey, continuing a trend quite distinctive from that recorded during the late 1970s housing boom. In the fourth quarter survey, three times as many families mentioned the availability of lower prices and good buys than complained about high house prices (24 versus 8 percent). Few consumers referred to the advisability of buying in advance of rising prices, which was the dominant motivation a decade ago. Rather than a predisposition to accelerate purchase timing, the prevailing mood is more toward waiting for market advantage.

These very favorable home-buying attitudes have been reflected in consumer purchases. Sales of single family homes were higher in 1986 than any other time since the late 1970s. Homes were purchased at an annual rate of 4.7 million units in the fourth quarter of 1986, the highest quarterly sales rate since 1978. For 1986 as a whole, 4.3 million homes were sold, up almost 2 million units from the 1982 recession low of 2.4 million. Nearly half of the improvement occurred in the first year of the recovery, when sales rose by nearly one million units to total 3.3 million in 1983. Since then, the pace of growth in sales has greatly slowed, with the cumulative three-year increase totaling one million units. Most of the improvement during the past few years has been in sales of existing homes, rather than those newly built.

Household Durables. Favorable attitudes toward buying conditions for household durables were held by 74 percent of all families in the fourth quarter 1986 survey, just below the all-time record level of 77 percent recorded in each of the first three quarters of 1986. These very favorable buying attitudes were based on the availability of price discounts and on lower interest rates. Although fewer consumers mentioned price discounts in the fourth quarter 1986 survey than a year earlier (32, down from 38 percent), many more mentioned the availability of lower interest rates on these purchases (23, up from 13 percent). Favorable attitudes toward buying conditions for household durables were propelled toward record levels by price discounts, but the maintenance of these favorable attitudes at record levels has become increasingly dependent on reductions in interest rates.

Stagnant Economy Expected

Fewer families reported hearing of recent favorable developments in the economy in the fourth quarter 1986 survey than at any other time during the past three years (26 percent). The proportion of families that thought the economy in general had improved during the past year fell to 44 percent in the fourth quarter from 49 percent one quarter earlier and 58 percent two quarters ago.

Favorable prospects for economic growth reached peak levels in mid-1983, and subsequently declined at a rapid pace through mid-1985. Since mid-1985, however, only minor further declines have been recorded. In each of the last six quarterly surveys, 57 to 58 percent of all families expected the performance of the national economy to remain similar to the prior year's. Many fewer consumers expected business conditions to either improve or worsen during the year ahead—each view was held by 20 percent of all families in the fourth quarter 1986 survey. Even though only slow economic growth was expected, prospects for the national economy during the year ahead were nonetheless viewed favorably. Among all families in the fourth quarter 1986 survey, 51 percent expected good times financially in the economy as a whole, only slightly below the 53 percent recorded one year earlier.

While consumers do not see a recession on the near-term horizon, they do not expect economic growth to continue uninterrupted over the longer term. More families in the fourth quarter 1986 survey expected an economic downturn sometime during the next five years or so than expected continuous growth that far into the future (47 versus 36 percent). With this perspective, the expectation of continued slow economic growth during the year ahead may be viewed as a welcome hiatus. Following more than a decade of volatile and uncertain times, it is the absence of such adversity and instability that now forms the threshold for favorable evaluations of the economy.

February 1987

What Do We Know About Saving Behavior?[1]

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Introduction

Personal saving behavior has both a scientific and a public policy interest. On the side of scientific concerns, understanding saving behavior is central to understanding economic growth, income inequality, and cyclical movements in the economy. On the side of policy, there has been much concern in recent years about the relatively low rate of personal saving in the U.S. economy and its implications for capital formation, productivity, and economic growth. A particular focus of part of the policy discussion involves the effect of the changing demographic structure of the U.S. on saving rates – the presumption being that an aging population will push the saving rate even lower than it has been.

Analytical Framework

Virtually all current analyses of saving behavior are cast in the framework of the life-cycle model. This is true even though there is a good deal of evidence that the standard version of the model does not do a very good job of explaining many of the stylized facts about U.S. saving behavior. Still, thinking about saving in a life-cycle framework is enormously useful, both for development and refinement of theory and as a framework for carrying out empirical investigations.

What does the life-cycle model say about the behavioral determinants of individual and aggregate saving? The idea is simple and appealing:

1. Consumers are presumed to have a set of expectations about lifetime wage rates, lifetime family structure, and the rate of return on assets over the lifetime. From these expectations, consumers visualize potential lifetime resources.
2. Consumers have a set of preferences relating to consumption at different dates over the lifetime – the usual assumption is that consumption today is more valuable than consumption tomorrow, other things equal, hence that consumers have positive time preference. That assumption is typically justified either by the assertion that tomorrow is an uncertain event to a consumer who might or might not be alive to enjoy consumption tomorrow, or by the assertion that consumers are myopic and are unable to visualize the consequences tomorrow of their behavior today.
3. Given these expectations about lifetime resources and preferences for consumption, consumers optimize discounted lifetime utility (consisting of consumption and leisure over the future) subject only to the single constraint of total lifetime resources – wage rates times hours. The fact that consumption and leisure patterns are constrained solely by lifetime resources means that consumption patterns over time are detached from earnings patterns over time. That is one of the central insights of the life-cycle hypothesis.
4. Since the path of preferred consumption over the lifetime is likely to be relatively flat in per capita terms, and since the earnings/labor hours path will typically rise sharply and drop to zero at retirement, there will usually be a gap between the preferred consumption at any given date and the current earnings for that same date. That gap generates either saving or dissaving.
5. As a generalization, consumers will tend to accumulate assets during their working years, thus building up a stock of assets available to finance retirement consumption. If there is no bequest motive, retirement consumption uses up assets completely – retired consumers decumulate assets at a rate sufficiently high to end up with zero assets at death.

This model produces several interesting results. Since consumers first save and then dissave over the life cycle, but end up saving nothing, national saving is a function of any factor that tends to result in younger consumers saving more (or less) than the dissaving of older consumers. If there is constant population growth, hence the proportions of households in each age group are constant over time, and if there is zero productivity growth, hence older cohorts of consumers have the same lifetime resources as younger cohorts, the life-cycle hypothesis produces the result that national saving is zero. On the other hand, if the population is growing so that there are relatively more younger consumers (who are savers) compared to older consumers (who are dissavers), aggregate national saving will grow even though each individual consumer saves nothing over his lifetime. And if there is technical change in the economy that produces a positive growth rate of productivity and real earnings, younger consumers (who are savers) will be richer than older consumers (the dissavers), hence the higher incomes of younger cohorts will produce more positive saving than the lower incomes of older consumers produces dissaving. Thus either a positive growth rate of population or a positive growth rate of real income will produce aggregate saving, even though no individual household saves (on balance) over its lifetime.

Two important ideas that are often embedded in the life-cycle model are that consumer saving is very sensitive to variations in interest rates and insensitive to variations in the timing of income. The first occurs because retirement consumption must be financed with assets accumulated dur-

[1]This essay is based on a talk given at the 34th Annual Conference on the Economic Outlook at The University of Michigan, November 1986. No literature citations are provided, although the ideas expressed here are not novel and can almost always be found in the writings of others. People whose ideas or writings have been drawn on substantially, directly or indirectly, would include Goldsmith, Kuznets, Friedman, Modigliani, King, Summers, Holbrook, Landsberger, Mayer, Blinder, Howrey & Hymans, Courant, Gramlich & Laitner, and Thaler & Shefrin. The key ideas about lump-sum payments come from Thaler & Shefrin. Most of the literature would be in disagreement with the conclusions in this paper.

ing the working lifetime, and the amount of deferring of present consumption in favor of future consumption is thought to be positively related to the rate-of-return to saving (deferring). The second occurs because consumers are thought to plan consumption and saving with lifetime expected income in mind, hence variations in when and in what form income is received have little impact on the income concept—the present value of expected lifetime income—relevant to such decisions. To this writer, both ideas seem suspect, although the evidence is far from conclusive.

Interest Rate Effects

A casual perusal of the time series evidence provides little support for the view that interest rates, particularly real interest rates (defined as nominal rates adjusted for the inflation rate and the tax rate) have a substantial influence on saving behavior. For example, interest rates changed dramatically for many consumers in the late 1970s with the invention of money market funds. Tax cuts had a substantial influence on marginal after-tax rates of return on saving in the early 1980s. And during the last several years real interest rates have been at the highest level during the postwar period because of the differential movements of nominal interest rates and price inflation. Yet none of these substantial changes in interest rates appears to have had any observable effect in the right direction. It is worth examining these episodes in a bit more detail.

Although most time-series of market interest rates would show declining real interest rates during the latter part of the 1970s (because price inflation rates were rising faster than nominal interest rates), that was clearly not true for a great many consumers. Prior to the introduction of money market funds into the economy, consumers with modest amounts of asset holdings (i.e., those who could not afford the $10,000 entry price for buying a Treasury bill) could only obtain nominal rates of return on savings of the order of 5 to 5½ percent—the rate on passbook saving accounts.

But with money market funds, many of these consumers had a choice of being able to invest in a bundle of fixed-income securities at nominal market interest rates rather than at the nominal savings passbook rate fixed by legislation. Thus, between 1977 and 1980, consumers moved from a world where 5 percent was the best nominal rate they could get on savings to a world where rates in excess of 15 percent could be obtained—roughly a tripling of the nominal rate. It could be argued that the real rate increased by the same absolute amount, since the alternative to money market funds would have been passbook savings, which remained constant over this period at the usual 5 to 5½ percent. It is impossible to detect any effect in the aggregate data of this substantial change in real rates of return on saving.

A similar story appears to hold for the substantial cuts in marginal income tax rates during the early 1980s, and for the substantial rise in real interest rates that occurred after 1982, when nominal interest rates stayed relatively high while rates of price inflation were declining sharply. During this entire period, the aggregate data showed that saving rates were gradually declining. No doubt there are substantial influences on saving behavior that have nothing to do with interest rate movements, but I find the time-series record over the last decade or so not a very plausible outcome for a world in which personal saving is really quite responsive to changes in real interest rates.

Moreover, while all of the models that deal with interest rates and saving use real interest rates, the evidence seems to be overwhelming that when consumers think about interest rates they think about nominal interest rates. Consider consumer reactions to the interest rate environment in 1980, when nominal interest rates were very high but price inflation rates were almost as high, and in 1986, when nominal interest rates had declined substantially relative to 1980 but when price inflation rates had declined much more sharply. Calculations of real interest rates, ignoring taxes but adjusting for the inflation rate, show that real interest rates were slightly negative in 1980 and were very high in 1986. Adjustment for tax effects would change the magnitudes but would not change the conclusion—that real interest rates rose substantially between 1980 and 1986.

Did consumers see the world that way? While there is no direct evidence on that issue—i.e., no data on whether consumers thought real interest rates were high or low in 1980 and 1986—there is overwhelming indirect evidence. In the monthly Survey of Consumer Attitudes, consumers are always asked whether they think the present is a good or bad time to buy houses, cars, and durables, and whatever they respond they are then asked "Why?". In 1980, consumers uniformly thought that this was a bad time to buy a house (about 70 percent held that view), and when asked why, the great majority reported that interest rates were high and credit was tight. In 1986, exactly the reverse situation prevailed: About 80 percent of consumers thought that this was a good time to buy a house, and when asked why, responded that interest rates were low and credit was easy to get.

It seems clear from this response pattern that consumers perceived interest rates as very high in 1980 and very low in 1986. Ever since the 1970s, consumers could always get mortgage money provided they were willing to pay a high enough rate, and it can be presumed that everybody knew that. Hence I interpret the "interest rates are high" and/or "credit is tight" response, or the reverse, as basically reflecting a perception of the price of money. From the data, it is entirely clear that nominal interest rates were very high in 1980, and moderately low in 1986, but that real interest rates showed the reverse pattern—negative in 1980 and sharply positive in 1986. Thus consumers clearly had nominal interest rates in mind when they responded to the question about housing.

Income Effects

Lifetime optimization strategies suggest that differences in the timing and form of expected income flows should have little influence on saving behavior. But such strategies may not be good descriptions of behavior for many consumers. It is not that consumers are incapable of visualizing that they need to make provisions for distant futures, and that decisions made now have an influence on outcomes in those distant futures. Rather, it may be that the uncertainties associated with the specifics of those distant futures may be so dominant in decision-making that consumers adopt fairly simple rules of thumb as representing guides to behavior that are manageable even if suboptimal. Theories with that flavor have been advanced in recent years, where the rules of thumb are statements like: "Never borrow except to buy a house or a car"; "Never borrow against a retirement asset like a pension fund"; "Adjust spending to the income of the principal wage-earner, and put the income of other wage earner into a savings account"; "Put money for a special occasion into a separate account"; and so on.

There is a lot of casual empirical evidence that many households seem to adopt budget-planning policies that fit those guidelines. For example, many consumers have always made use of Christmas clubs, even though no interest is earned on the accumulated assets and the account cannot be drawn on until a specified date. Although a great many households have equity in life insurance policies that could be borrowed against at rates much lower than market rates during recent decades, consumers rarely borrow against the equity in their insurance policies, and many consumers who have substantial equity in insurance borrow at rates that are several times higher than the rates on policy loans. About two-thirds of U.S. taxpayers get income tax refunds every year, despite the fact that the overwithholding does not accrue interest—clearly a money-losing proposition.

What these scattered pieces of evidence suggest is that consumers often take steps to remove temptations to spend money, even when it involves a suboptimal choice. Interestingly enough, the rule-of-thumb notion clearly suggests that consumer responses to various types of income receipts should depend more on the relative size of different types of receipts than on whether they were expected or unexpected. A consumption pattern geared to spending a flow of regularly received payments might not be much affected by the arrival of a small increment to that flow, but it might be affected by the arrival of a large increment—whether the arrival was expected or not.

There is a bit of empirical evidence that bears on this point—the effect of large versus small irregular payments on saving. In the 1950s, a large number of people in the State of Israel received reparations payments from the West German government related to the confiscation during the Nazi era of assets held by Israeli citizens or their families. These payments ranged from rather small—equivalent to a month's income—to very substantial—equivalent to several years' income. A study of the pattern of spending from the reparations payments indicated that small payments were spent just about like regular income, while large payments were spent very differently—being largely saved.

A second study looked at spending and saving out of irregular income based on Japanese data during the 1970s. In Japan, a significant part of annual compensation is received in the form of lump-sum bonus payments received several times a year. Bonuses are not unexpected, since they are an institutionalized part of the compensation system. But the amount of the bonus varies from year to year, depending on the firm's profits. Studies of the relationship between the proportion of total compensation paid in the form of bonuses and the ratio of savings to income suggests that the two are highly correlated, with a larger fraction of income in the form of bonuses resulting in a larger fraction of income being saved. These data also suggest that it makes no difference whether the bonus was anticipated or not, since dividing the bonus into expected and unexpected components produced the same effect on saving.

Policy Implications

Although we certainly do not know as much as we need to know in order to provide policy-makers with adequate guidance about what steps might change the personal saving rate, we certainly know enough to provide some plausible speculations. Overall, I read the evidence as suggesting that policies designed to change the after-tax rate of return to saving are unlikely to be successful in significantly modifying the personal saving rate. I do not think the evidence is strong enough to be dogmatic on that point, although the various attempts to estimate empirical responses seem to suggest that expecting very large effects from interest rate policies is not a good bet. Yet virtually all of our attempts to influence saving rates at the national level—changes in tax rates, introducing new tax preferences for retirement saving, introducing new financial instruments with higher rates of return, etc.—have focused on rate-of-return incentives.

Perhaps it is time to try something different. One interesting possibility might be to try policies designed to influence saving by changing the mix of income payments between those received regularly and those received irregularly. As I have noted above, there is some evidence that consumers treat large irregular payments very differently than they treat either small regular payments or small irregular ones.

Several possibilities come to mind where such a policy might be encouraged or implemented. First, it is my impression that more and more firms are beginning to think in terms of having some kind of profit-sharing plan as part of an employee compensation package. The reason has nothing to do with potential impact on saving behavior, but rather represents an attempt to link productivity and profits in a way that will encourage efficiency. But if payments schemes of that sort took the form of a substantial fraction of an employee's annual compensation being in the form of a profit-sharing plan, and if the receipt of that income were lump sums rather than regular, it might well have a significant influence on personal saving behavior.

Second, one could imagine that the Treasury could adopt a policy that would encourage people to increase the amount of income tax overwithholding. As noted above, about two-thirds of American taxpayers currently overwithhold, but the amounts are relatively small and do not constitute a large fraction of annual after-tax income. It would be easy enough to devise tax incentives to overwithhold, and it is certainly conceivable that a substantial increase in overwithholding would result in a significant impact on the saving rate of U.S. consumers.

While it is true that policies of this sort would not be firmly rooted in strong empirical evidence, it is also true that the policies we have adopted during the last decade—manipulation of the after-tax rate of return on saving—are also not firmly rooted in evidence and appear not to have worked. Experimenting with policy designed to increase the irregularity of income receipts seems to me to have as good prospects as any of changing the saving behavior of U.S. consumers.

Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL													
ECONOMIC INDICATOR	Quarterly Data										Annual Data		
	Actual					Projected					Actual		Proj.
	1985:4	1986:1	1986:2	1986:3	1986:4	1986:4	1987:1	1987:2	1987:3	1987:4	1985	1986	1987
GROSS NATIONAL PRODUCT	4,087.7	4,149.2	4,175.6	4,240.7	4,260.6	4,291.5	4,341.5	4,405.5	4,482.0	4,565.0	3,998.1	4,206.5	4,448.5
GNP IMPLICIT PRICE DEFLATOR (index, 1982 = 100)	112.8	113.5	114.0	115.0	115.2	115.7	116.6	117.4	118.4	119.3	111.5	114.4	118.0
CORPORATE PROFITS AFTER TAXES*	139.4	126.9	128.8	135.9	NA	142.5	140.0	144.0	150.5	152.3	131.4	NA	147.5
UNEMPLOYMENT RATE (percent)	7.03	7.07	7.13	6.93	6.83	6.90	7.00	6.90	6.85	6.80	7.19	6.99	6.90
INDUSTRIAL PRODUCTION (index, 1977 = 100)	124.7	125.0	124.4	125.0	125.9	126.0	126.0	127.0	128.5	130.0	123.8	125.1	127.8
NEW PRIVATE HOUSING UNITS STARTED (millions)*	1.797	1.938	1.878	1.758	1.701	1.750	1.725	1.710	1.710	1.735	1.742	1.819	1.720
CONSUMER PRICE INDEX (annualized percent change from prior quarter or year)	4.32	1.44	-1.66	2.56	2.83	3.05	3.35	3.50	3.75	3.90	3.54	1.90	3.34
3-MONTH TREASURY BILL RATE (%)	7.15	6.89	6.13	5.53	5.34	5.25	5.10	5.10	5.25	5.50	7.49	5.97	5.20
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	11.04	9.68	9.06	9.14	NA	9.00	8.85	8.75	8.98	9.13	11.75	NA	8.94
GNP IN 1982 DOLLARS	3,622.3	3,655.9	3,661.4	3,686.4	3,698.3	3,709.0	3,730.0	3,755.3	3,782.0	3,816.5	3,585.2	3,675.5	3,771.0
PERSONAL CONSUMPTION EXPENDITURES (1982 dollars)	2,351.7	2,372.7	2,408.4	2,448.0	2,447.4	2,446.0	2,457.0	2,471.0	2,487.0	2,502.0	2,324.5	2,419.1	2,483.4
NONRESIDENTIAL FIXED INVESTMENT (1982 dollars)	476.9	457.8	456.8	454.4	455.9	458.6	453.5	455.0	458.0	462.5	461.4	456.2	457.0
RESIDENTIAL FIXED INVESTMENT (1982 dollars)	181.5	186.3	192.7	197.2	200.2	196.0	196.0	196.0	195.0	194.0	177.3	194.1	194.2
CHANGE IN BUSINESS INVENTORIES (1982 dollars)	-5.2	39.9	15.1	-0.3	-24.4	10.0	18.5	14.5	21.0	14.8	9.0	7.6	18.5
NET EXPORTS (1982 dollars)	-132.0	-125.9	-153.9	-163.3	-151.1	-149.0	-144.0	-140.0	-135.0	-130.0	-108.2	-148.6	-139.0
FEDERAL GOVERNMENT PURCHASES (1982 dollars)	347.2	320.4	328.9	330.9	350.5	344.0	333.0	333.5	334.6	337.0	323.6	332.7	335.0
STATE AND LOCAL GOVERNMENT PURCHASES (1982 dollars)	402.2	404.8	413.3	419.5	419.7	421.0	423.0	425.0	427.0	431.0	397.6	414.3	426.5

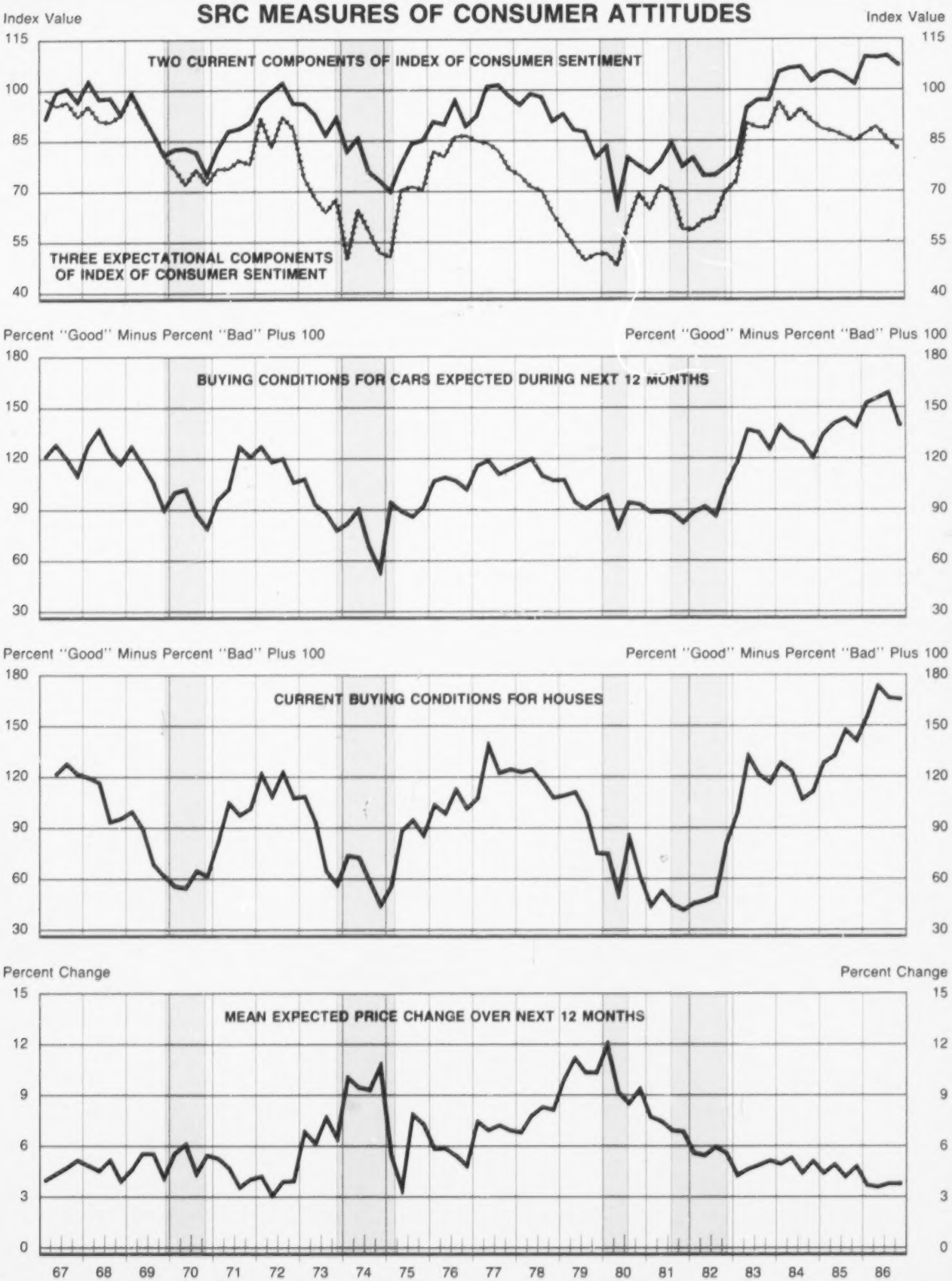
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS													
ECONOMIC INDICATOR	Quarterly Data										Annual Data		
	1984:3	1984:4	1985:1	1985:2	1985:3	1985:4	1986:1	1986:2	1986:3	1986:4	1984	1985	1986
GROSS NATIONAL PRODUCT	3,799.7	3,845.6	3,909.3	3,965.0	4,030.5	4,087.7	4,149.2	4,175.6	4,240.7	4,260.6	3,765.0	3,998.1	4,206.5
PERSONAL CONSUMPTION EXPENDITURES	2,445.6	2,487.2	2,530.9	2,576.0	2,627.1	2,667.9	2,697.9	2,732.0	2,799.8	2,822.5	2,428.2	2,600.5	2,763.1
GROSS PRIVATE DOMESTIC INVESTMENT	670.3	661.1	650.6	667.1	657.4	669.5	708.3	687.3	675.8	665.3	662.1	661.1	684.2
NET EXPORTS	-60.0	-66.1	-49.4	-77.1	-83.7	-105.3	-93.7	-104.5	-108.9	-113.6	-58.7	-78.9	-105.2
GOVERNMENT PURCHASES	743.8	763.4	777.3	799.0	829.7	855.6	836.7	860.8	874.0	886.5	733.4	815.4	864.5
DISPOSABLE PERSONAL INCOME	2,693.8	2,729.6	2,755.4	2,842.3	2,832.0	2,882.2	2,935.1	2,978.5	2,979.9	2,994.6	2,670.6	2,828.0	2,972.0
PERSONAL SAVING RATE (percent of disposable income)	6.4	6.0	5.2	6.5	4.2	4.4	5.0	5.1	2.8	2.5	6.3	5.1	3.9

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late February, and projected data, released by ASA-NBER in December, are displayed for fourth quarter 1986.

Sources: Projections: American Statistical Association – National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

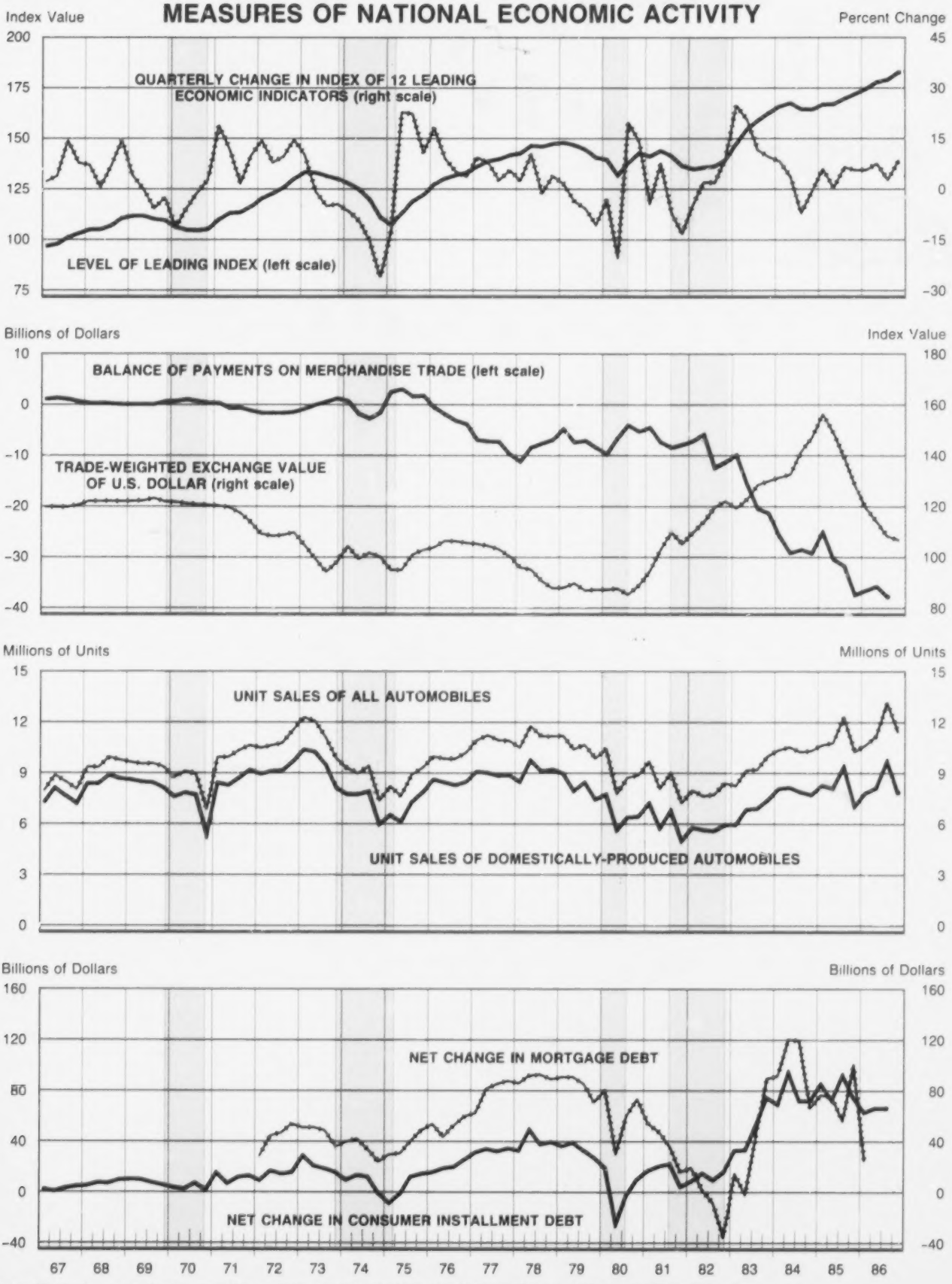
*Substantial revision of the data for variables marked with an asterisk has occurred since the last printing.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

MEASURES OF NATIONAL ECONOMIC ACTIVITY



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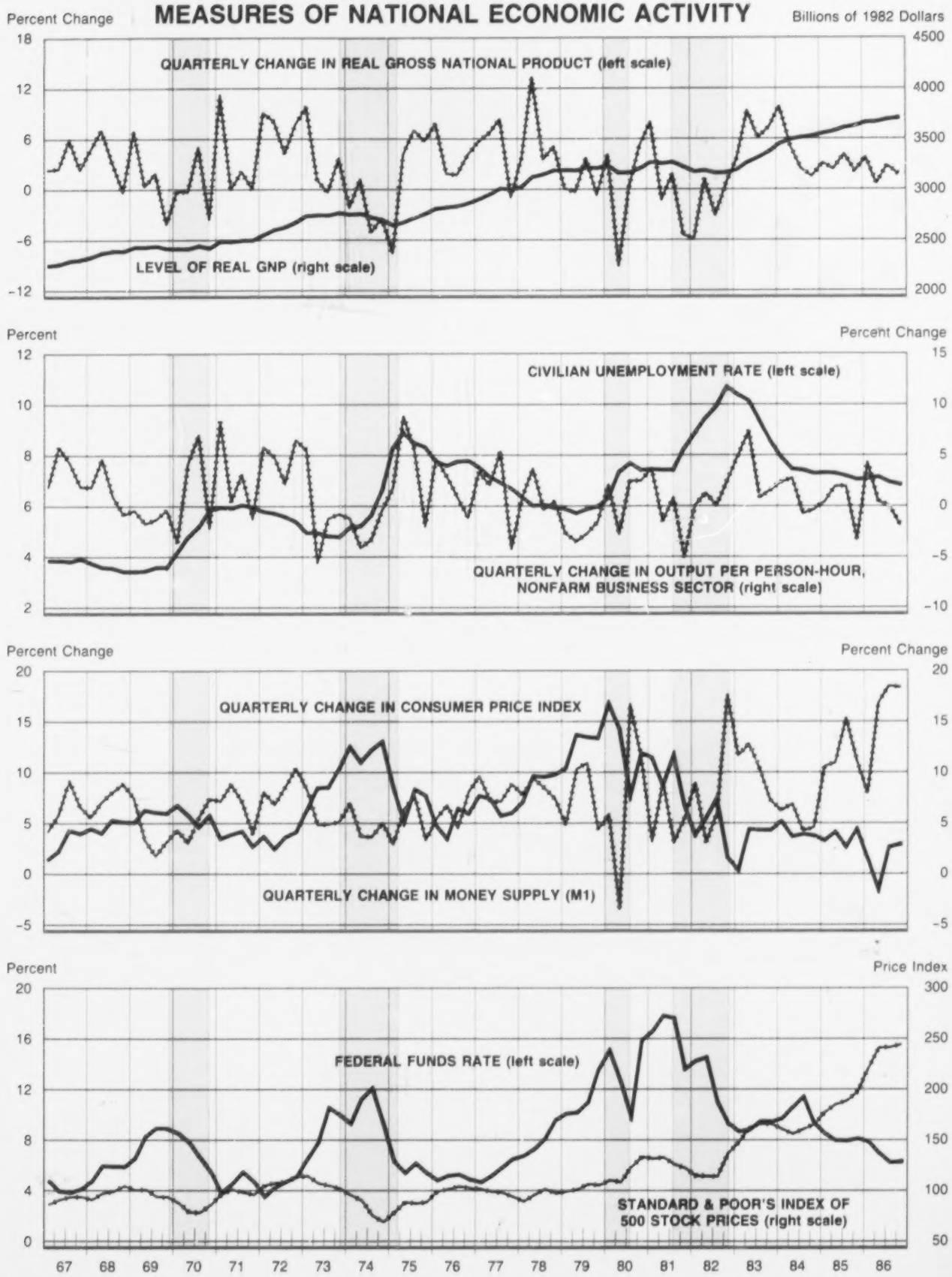
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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Author Index to Volume 13 (1986)

Blinder, Alan S.
The Policy Mix: Lessons from the Recent Past 1/3*

Curtin, Richard T.
Favorable Buying Attitudes Reach New Peak 1/11
Buying Attitudes Set New Records—Yet Again 2/7
A Discount that Consumers Couldn't Refuse 3/11
The Discount Waiting Game 4/14

Farley, Reynolds
Assessing Black Progress: Voting and Citizenship Rights, Residency and Housing, Education 2/16
Assessing Black Progress: Employment, Occupation, Earnings, Income, Poverty 3/14

Frey, William H.
Lifecourse Migration and Redistribution of the Elderly across U.S. Regions and Metropolitan Areas 2/10

Hymans, Saul H.; Crary, Joan P.; and Wolfe, Janet C.
The U.S. Economic Outlook for 1987-88 ..... 4/3

Juster, F. Thomas
Prospects for Continued Recovery 1/9
Preferences for Work and Leisure 1/15
The Political Economy Scoreboard 3/3
What Do We Know about Saving Behavior? 4/17

McCracken, Paul W.
Foreign Trade Improvement to Boost Economy 4/12

Traugott, Michael W.
Changes in the Makeup of the 100th Congress 3/7

Weidenbaum, Murray L.
Tax Reform and the American Economy: Good News and Bad News 2/3

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Martin Gold and David W. Mann
Alternative Schools for Troublesome Secondary Students

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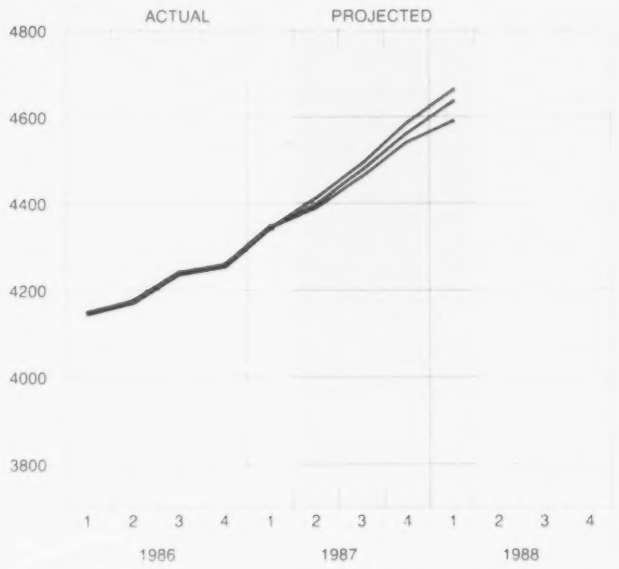
ECONOMIC PROSPECTS: Actual and projected seasonally adjusted quarterly data at annual rates.

GROSS NATIONAL PRODUCT

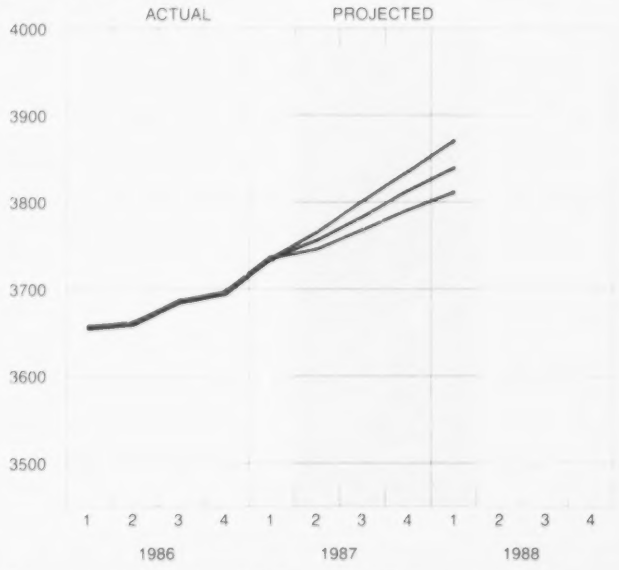
IN CURRENT DOLLARS
Billions of Dollars



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

GROSS NATIONAL PRODUCT

IN CONSTANT 1982 DOLLARS
Billions of Dollars



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What is the Fed up to?

Paul Wachtel
Professor and Chairman, Department of Economics
Graduate School of Business Administration
New York University

Recent Money Supply Trends

The facts are quite simple: in 1986 the narrowly defined money supply (M1) grew by 15.2 percent, well above the Federal Reserve's own target growth range for the year of 3 to 8 percent (see the chart below). What's going on here?

This is an important question for which there is no satisfactory answer. Some suggest that the behavior of the money supply over the last year is understandable in the light of some unusual developments in the financial sector and, therefore, no cause for worry. However, the case for this approach, including that made by Federal Reserve Board chairman Paul Volcker at his February appearance before the Senate Banking Committee, is not entirely convincing. Other answers suggest that for a variety of reasons recent monetary policy may be severely misguided and that the Fed is running some serious risks.

Twice each year the Federal Open Market Committee makes a formal report to Congress on the conduct of monetary policy. In his congressional testimony on February 19th, Volcker argued that the extraordinary sensitivity of money demand to the decline in interest rates over the last several years, accompanied by the final stages of interest rate deregulation on transactions deposits, have come together to make the narrow money supply an unreliable indicator of policy. He concluded that the resultant uncertainty causes M1 "to provide little guidance for the FOMC's operational decisions or reliable information for the Congress or for market participants." As a result, the Fed took the bold step of dispensing with M1 growth targets for 1987 altogether.

The technical underpinnings of this decision are not subject to dispute. There is substantial agreement that the unusual behavior of M1 is not understood. However, the 1987 Economic Report of the President, presumably written by Council Of Economic Advisors chairman Beryl Sprinkel, who is much more closely allied to the monetarist approach than Volcker has ever been, is much less sanguine about the consequences of recent monetary policy trends. The Report takes note of the Fed's viewpoint, but it adds some warnings:

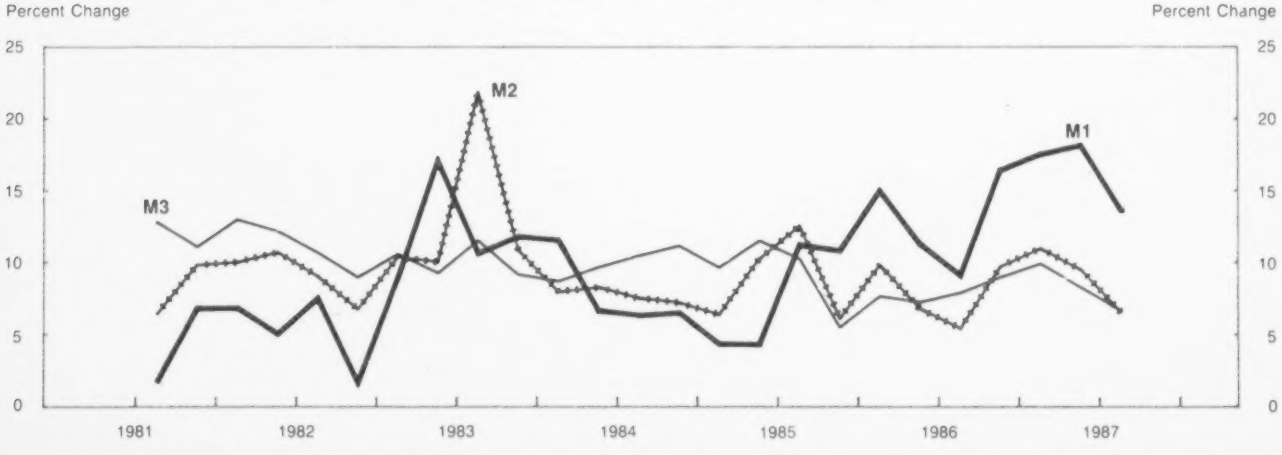
> Until a more reliable relationship between M1 and nominal income growth is reestablished, however, the implications of this rapid M1 growth remain uncertain.... Although the nature of the change in velocity [the ratio of nominal income to M1] behavior is not fully understood at this time, no plausible assessment of the change in velocity growth would imply a permanent need for such rapid money growth. Analysts agree that at some point the rate of monetary growth must be reduced if the ultimate goal of price stability is to be achieved. The difficult policy issue is one of timing....

Whereas the Fed dismisses the validity of M1 targeting in its report, the CEA is more mindful of the risks in the monetary policy path followed by the Federal Reserve. In addition to the rapid growth of M1, growth of the more broadly defined monetary aggregates in 1986 has been at the very top of the Fed's target growth ranges (see the chart), and growth in the total debt aggregate exceeded the target range.

Even the most conservative observer must acknowledge that there is a risk of igniting inflationary pressures. The risk may not be as large as it would have been earlier because real growth has been fairly lethargic throughout 1985 and 1986. However, the risks should not be dismissed. Chairman Volcker and his colleagues on the FOMC, which includes several independent-minded Reagan appointees, know full well what the risks are in the current stance of monetary policy. Why are they taking these risks?

Note: An earlier version of this article appears in the Spring/Summer 1987 issue of *NYU Business*.

Quarterly Change in Monetary Aggregates, 1981-1987



Reasons for the Fed's Policy

The Federal Reserve's policy statements do not provide any answers to this question. However, there seem to be three distinct reasons why the Fed tolerates rapid money growth and its concomitant risks:

The Domestic Economy. The Federal Reserve worries about the lackluster performance of the domestic economy. It is also so convinced of its own success during the first half of the 1980s in wringing inflation out of the system that it is now placing greater emphasis on the real economy. Until the international economy responds to the fall of the dollar, the Federal Reserve is not confident that the U.S. domestic economy can sustain the aging expansion.

Fiscal Policy. The Federal Reserve, which has the power to conduct monetary policy, would also like to aim fiscal policy away from deficits. There is nothing that the Fed can do to reduce the federal deficit directly, no matter how concerned it is about the ultimate effects of the Reagan deficits. Thus, it would like to try to force the hand of fiscal policy.

The Fed has until recently encouraged the dollar depreciation and kept interest rates from rising, both of which have made it more difficult for the Treasury to finance the deficit by borrowing abroad. Thus there is continued pressure on Congress to finally take convincing steps to reduce the deficit. It seems that the Fed would like to maintain this pressure for changes in fiscal policy that go beyond the largely discredited and ineffective Gramm-Rudman-Hollings bill of the last Congress.

Fragility of the Financial System. The current stance of monetary policy seems to be influenced in an important way by concerns over the fragility of the domestic and international financial system. There are two elements of the system which are particularly fragile now: the portfolio of bank loans to developing countries and the thrift industry—the savings and loan associations.

The dimensions of the international debt crisis and the exposure of most large American banks are well known. Loan defaults by sovereign nations would seriously affect the American banking industry, but the greater risk is that an avalance of defaults would increase the risk of all foreign borrowing, reduce the ability of the international banking system to finance world trade, and throw the international economy into recession. A low interest rate policy in the U.S. helps stave off such an occurrence.

It is also well known that a large portion of the thrift industry is, in actuality, bankrupt or close to it. If monetary policy were to tighten and interest rates to rise, there would quickly be a large increase in the number of declared bankruptcies among savings and loan associations. An increase in short-term interest rates increases the cost of funds to the S&Ls, many of which have large portfolios of illiquid assets.

A General Accounting Office report issued in March suggested that the agency that insures S&L deposits—the FSLIC—was technically bankrupt at year-end 1986. The insurance fund required $8 billion for thrifts that were expected to fail soon, which was at least $5 billion more that its end-of-year reserves. Edwin Gray, chairman of the FHLBB, estimates that $19.5 billion is required to assist the thrift industry. Congress is seriously considering bailout legislation; if enacted, such a bailout would be a deficit-increasing federal expenditure. If additional funds are required, the Fed would have to provide them through the discount window. The Fed is surely not eager to make any policy change that would lead to bailout expenditures or an expansion of emergency discount borrowings. It seems that the hands of the monetary policy makers who might want to tighten policy are tied by the threat of financial fragility.

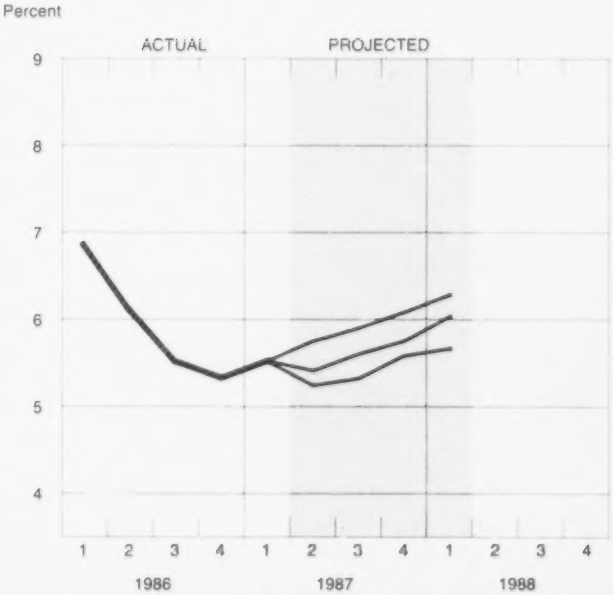
A Change in Policy?

It is hard to know exactly why the Federal Reserve chose to allow the money supply to expand so rapidly in 1986. Perhaps it did so because monetary policy priorities shifted to concern about real growth, the deficit, and—most importantly—the fragility of the financial system. Evidence accumulating in the spring of 1987 indicates that the Fed might be waking up.

Although it is not yet a sure thing, there are indications that the money supply expansion binge is ending. Why might this change in priorities be occurring? Concern about economic growth and the government deficit have to some extent been replaced by concern about inflation and the (perhaps too rapid) fall of the dollar. As 1987 unfolds, it may turn out that the Fed's priority is the balance of trade and pressure on the dollar. If so, the Fed may be content to let Congress grapple with the government deficit and the fragile financial system.

May 1987

3-MONTH TREASURY BILL RATE



Sources: Actual data are from U.S. Department of Commerce; projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

Consumer Spending and the Outlook for 1987

F. Thomas Juster
Survey Research Center and
Department of Economics
The University of Michigan

The current economic expansion is now in its fifth year—above average as expansions go in the U.S. during the postwar period, but below average for the pace of expansion. During the first couple of years after the November 1982 turning point coming out of the severe recession of 1981–82, the expansion was reasonably normal by historical standards: Consumption turned first, government fiscal policy contributed a substantial stimulus, and business investment followed along with considerable vigor, especially in 1984.

However, since the end of 1984, the expansion has had an unusual configuration with no historical precedent. The rate of expansion overall has been modest—the GNP growth rate over the two-year span from the end of 1984 to the end of 1986 has been 2.5 percent per year. But this modest growth rate has been compounded from a very mixed bag of components. Overall, consumption has grown at a rate of almost 4 percent a year since the end of 1984, and outlays for durable goods have grown at about 8 percent per year over this span. While total investment has grown at above 3 percent per year, that growth has been a mixture of virtually no growth in business fixed investment combined with about a 10 percent per year growth in residential fixed investment—the latter dominantly a consumer-driven phenomenon.

As we are all aware from extensive public discussion, the growth rate of net exports over this period has been sharply negative—imports growing a good deal more than exports, thus holding down the overall growth rate of GNP. Finally, federal government spending has grown substantially—over 7 percent per year for the federal sector, and over 4 percent per year for the state and local government sector. Thus the last two years of the current expansion can be characterized as a period in which substantial growth in consumer spending and housing, plus moderate growth in federal spending, have combined with no growth in business investment spending and negative growth in net exports to produce a sluggish 2.5 percent per year growth in overall output. In short, consumers, and to some extent the public sector, have held up the system.

Not only has consumption growth been substantially larger than GNP growth, but it has been much larger than the growth of disposable income. Again on the basis of extensive public discussion, we are all aware of the fact that the rate of personal saving has dropped to record low levels in the U.S. during the last year or so. Concretely, disposable income grew by only about 2 percent per year over the period 1984–1986, while consumption grew by almost double that amount. As an arithmetic consequence, the saving rate declined sharply, from around 5 percent in 1984 to somewhere around 3 percent currently. The rapid growth of consumer spending relative to disposable income has of course meant that consumer credit use has expanded rapidly over the last couple of years; that is true for both housing mortgage debt and consumer installment debt, although during the last couple of quarters the growth of consumer installment debt has slowed markedly while housing debt has expanded enormously—some think as a consequence of the tax reform legislation which continues to make housing mortage payments tax deductible while gradually eliminating deductibility for other consumer interest payments.

This record has raised questions among analysts of the business scene as to whether or not consumers will continue to spend at the pace of the last several years. As some analysts see it, consumer incomes have been rising very sluggishly, consumer debt has grown substantially, the saving rate has been driven down to historically low levels, and the debt-income ratio is at an all-time high. Given this set of circumstances, it is not unreasonable to suppose that consumers will be "taking a breather," as it were, during the next year or so to digest the excesses of the last couple of years and bring the saving rate back to more normal levels. If that happens, the main source of strength in the current recovery will have disappeared, and the recovery itself may be in jeopardy.

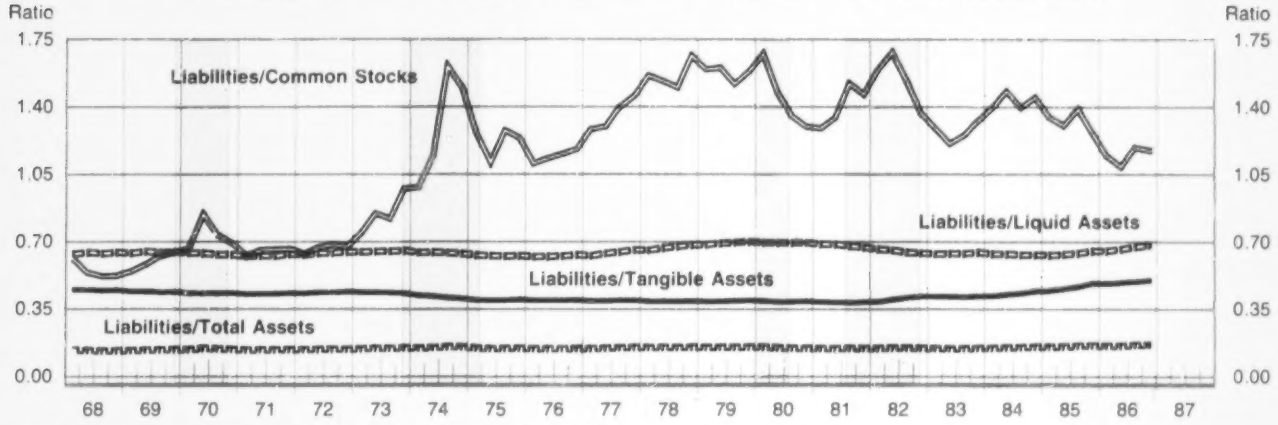
What is a reasonable assessment of this view of consumer spending prospects? One can examine the issue by looking at the behavioral data on consumer spending, debt repayments, debt outstanding, and financial portfolios. Alternatively, one can look at data on consumer attitudes and expectations, which presumably reflect the influences of all these forces. In this article, we take a look at both.

Debt Burden

As usual, there are several ways of looking at the behavioral issue relating to debt burden. One way is to look at consumer portfolios, and ask whether the rise in consumer debt is out of line with the usual share of debt in total consumer portfolios. For that, we need to examine debt, stocks of tangible assets, and financial asset holdings.

In the aggregate, there is a little evidence that consumer portfolios have become a bit unbalanced during the last few years (see the chart accompanying this article). The ratio of consumer liabilities (mortgage debt, installment debt, etc.) to tangible asset holdings (houses, cars, and durable goods) has risen from around 0.4 to about 0.5 during the last three years; similar ratios were around 0.45 during the 1960s, and lower—a bit under 0.4—during the 1970s when inflation rates drove up asset values relative to debt. Consumers have about two-thirds as much liabilities as liquid asset holdings—a slightly higher ratio than three years ago but much the same as comparable ratios during the 1960s and 1970s. Consumer liabilities relative to holdings of common stock are lower than during most of the 1980s (because of the rise in stock prices) but much higher than during the 1960s and early 1970s, while liabilities have about the same ratio to holdings of pension and insurance reserves as they have had since the 1960s. Overall, the ratio of total consumer liabilities to total consumer assets is higher than three years ago (about 16.5 percent com-

TRENDS IN CONSUMER LIABILITY-TO-ASSET RATIOS, 1968-1986



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

pared to 14.5 percent), and the current figure represents an all-time high.

The most often cited figure here is the debt/income ratio, which moved up to an all-time high late in 1986 and has been growing steadily throughout the current expansion. That ratio—the amount of nonmortgage debt outstanding relative to the annual flow of consumer income, is neither fish nor fowl—it does not compare portfolios (debts to assets) nor does it compare debt burden (debt repayments to income flows). Thus it is hard to know what to make of those data.

While the comparisons above indicate that the debt-asset ratio in consumer portfolios is relatively high, we cannot really compare the debt burden/income flow ratio except for particular products where the relevant data can be obtained. That comparison can be done for automobiles and yields some very interesting results. Over the 14-year span 1972–1986 fourth quarter, the average price of vehicles has approximately tripled, the average amount financed by debt has gone up almost four times, and the ratio of the amount of automobile debt financed to income has gone up substantially (from about 28 percent to over 39 percent). But at the same time, the average maturity on new automobile contracts has gone up almost 50 percent—from roughly 35 months to over 49 months. As a consequence, the average monthly payment has less than tripled, and shows about the same ratio to income in 1986 as it showed in 1972. In fact, there is no trend in the series over the entire span from 1972 to 1986.

Preliminary evidence relating to housing debt appears to show somewhat the same pattern, although the ratio of housing mortgage payments to income got to be very substantial in the early 1980s when interest rates on house mortgages were in the 15–18 percent zone for a few years. But the evidence seems to suggest that, at current interest rates, housing mortgage payments relative to consumer income have not changed a great deal relative to the 1970s.

How should one interpret these results? If debt burden is taken to be the amount of contractual commitment relative to consumer income reflected by consumer and mortgage debt, the implications of the reliable data on automobiles and the speculative inferences from incomplete data on housing suggest that the debt burden has not gone up over the last couple of years, despite the substantial rise in outstanding debt. The basic reason is that maturities have expanded substantially and, in the case of housing, that interest rates have come down substantially. If that is what is meant by debt burden, the conclusion would be: Debt burden has not changed much. And if debt burden influences future spending, the conclusion would be: A continuation of consumer spending trends is not in great jeopardy.

There are some attitudinal data produced by The University of Michigan's monthly Survey of Consumer Attitudes that relate directly to the same issue. Since the middle 1970s, these surveys have asked consumers: "If there were something that you wanted to buy, do you think that *now* is a time when it would be OK for you to *buy it on credit*, or is now a time when you would be *especially reluctant* to take on new debt?" A similar question has been asked since the middle 1970s on use of saving: "OK to use your savings for a major purchase, or would you be especially reluctant now?" These series show the expected cyclical response—during recessions the reluctant proportion rose and the not reluctant proportion fell, while during recoveries the reverse happened. The "OK to use" proportion continued to rise through about the middle of 1986, but since July of last year, there has been some distinct slippage in responses to both savings and credit use questions—consumers reporting that they are perceptibly more reluctant to use savings or credit to make major purchases.

Thus the evidence on whether the amount of debt outstanding relative to income constitutes a prospective burden that will inhibit consumer spending this year and next, or whether it does not, is mixed. Looking at the portfolio data, there is some evidence that consumer debt relative to consumer assets is higher than normal. Looking at debt burden as reflected by contractual payment flows relative to income, there is no evidence that debt burden is more of a problem now than two years ago. Looking at the amount of outstanding debt relative to income flows, debt is clearly high by historical standards. And looking at attitudes toward the use of debt or savings to finance purchases, there is some evidence that consumer willingness to incur further debt is weaker now than it was in the middle of last year. Overall, it looks as if one should be a bit cautious—recent changes in consumer financial position and debt

commitments relative to income flows may well have a negative influence on consumer spending behavior during the next year or so.

Consumer Attitudes Generally

Besides looking at debt, asset, and income relationships, we can also examine consumer expectations and attitudes generally as providing some clues to future consumer spending and saving behavior. These data are detailed in the article by Richard Curtin in this issue, but a brief look at them from a longer time perspective is useful.

Overall, the Index of Consumer Sentiment can be viewed as holding up at a remarkably high level, all things considered. Values of the ICS in the low 90s have pertained for a couple of years now, with some mild tendency toward decline from the high 90s registered a few years ago. But the all-time highs of this index were only in the low hundreds, and the current level is not that much below these all-time highs.

This relatively high level of consumer sentiment is being driven by a very favorable set of expectations relating to prices and credit market conditions. Price expectations themselves have been stable for a couple of years at around the 4 percent expected inflation level, and consumers seem to be more confident that inflation rates will continue to be low: Increased confidence is inferred from the fact that the dispersion of price expectations among consumers has narrowed appreciably over the last year, with many fewer consumers expecting either price declines or very large price increases, and relatively more expecting modest price increases close to the average expected change. Reduced dispersion is likely to mean greater confidence on the part of consumers generally that inflation really will continue at about the rate that is presently expected.

The other factor holding up consumer attitudes is the very high level of the market conditions measure in the Index of Consumer Sentiment. Assessments that now is a good time to buy houses, cars, and durables are at close to historic highs, and have been at very high levels over the last couple of years. Consumers clearly perceive that interest rates and financing conditions generally are very favorable to purchases, that good buys are available at reasonable prices, and hence that now is a very good time to buy durable goods.

The sources of concern in the general consumer attitudes data relate to consumer expectations about business conditions and about their own financial prospects. The expectations component of the consumer sentiment index is far from its all-time highs, and has shown a consistent decline for a couple of years (see the top chart on p. 17). Thus the high level of consumer sentiment does not translate directly into a high level of consumer optimism. The sentiment level is strongly influenced by the extremely buoyant level of consumer assessments of market conditions, which do not necessarily have anything to do with optimism about either the economy or consumers' personal finances.

Conclusions

1. Consumers have been acting a bit like less-developed countries during the last several years—stretching out their debt payments to make them less burdensome on current income, cutting back on their savings, and leveraging their financial portfolios.
2. Consumers are relatively buoyant about economic conditions currently and, in particular, have a strong liking for the price stability and declines in nominal interest rates that have accompanied the last several years.
3. Although debt clearly has increased quite a lot, debt burden is probably not a serious current constraint, although it will be an inhibiting factor. And even if debt burden in the aggregate is not a serious constraint, there are clearly some overextended households, and a good many more would find themselves overextended if a recession were to develop.
4. Continued stability of both prices and interest rates is probably crucial to continuation of consumer willingness to spend at normal rates.
5. Even though consumers are relatively buoyant and there is no strong indication that their willingness to spend has decreased markedly, it is not plausible, given the data, that consumer spending will grow at a faster rate than income over the next several years. That is, although consumers are likely to hold up their end and not go into a shell, they are unlikely to repeat the performance of the last several years where they almost singlehandedly sustained the economic recovery.
6. Thus some other economic sector is going to have to provide the necessary exogenous thrust to maintain the real growth rate—investment, net exports, or government.
7. If problems emerge from the consumer perspective, they are likely to be found in the area of interest rates (first) and prices (second).

May 1987

Note to Subscribers: Because of persistent delays in meeting our publication schedule, we have returned to a seasonal dating scheme. Dating of future issues will correspond more nearly to actual time of publication than has been our practice in the recent past. *Subscription fulfillment* will continue to be based on volume and number, which will proceed sequentially as before (with each volume containing four numbered issues.)

Consumer Confidence Remains Favorable amid Growing Apprehensions

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Recent ICS Trends

The Index of Consumer Sentiment was 90.5 in the first quarter 1987 survey, down five points from one year earlier and a total of 9 points below the cyclical peak recorded at the start of 1984 (see the chart below). Although the current reading is the lowest level recorded during the past four years, it is still higher than the cyclical peak recorded in the late 1970s. Overall, such a sustained period of consumer confidence has not been recorded since the 1960s. To be sure, the confidence exhibited by consumers in the 1980s is quite distinct from that of the 1960s. Now consumer confidence is more defensive in orientation, based on the avoidance of the excesses of the past decade. Although consumers do not expect anything better than continued sluggish growth during the year ahead, few expect a recession. That growth has slowed is not nearly as important as the expectation that the economy will not slide into recession.

The small overall decline in consumer sentiment during the past year has masked significant divergences in the underlying measures. Most of the weakness can be traced to the expected poor performance of the domestic economy during the year ahead, while attitudes toward buying conditions have remained at relatively favorable levels. Although many consumers have emphasized their concerns with unemployment, slow domestic growth was also expected to promote the continued availability of purchase discounts. The strength of the current mixture of attitudes and expectations is that it has thus far proved less volatile in responding to economic news than was true during the 1970s. The vulnerability of the current situation is that the maintenance of favorable attitudes has become increasingly dependent on low interest and inflation rates.

Personal Financial Prospects

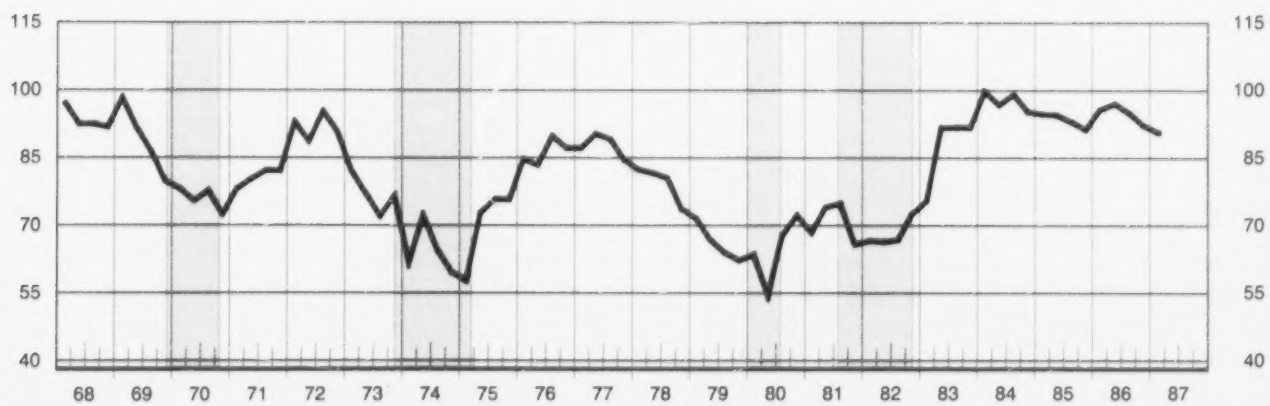
The 1987 surveys indicate that the overall financial situation of American families has remained at the relatively favorable levels that have been recorded throughout the past three years. In the first quarter 1987 survey, 43 percent of all families reported that their financial situation had improved, nearly identical to the figures recorded one and two years earlier. When asked to explain how their financial situation had improved or worsened during the past year, 35 percent of all families mentioned that their family income had increased, identical to the figures recorded one and three years earlier. Importantly, just 10 percent of all families complained about the erosion of living standards due to inflation at the start of 1987, the lowest level in twenty years. The very low rate of inflation during 1986 played a significant role in extending the life of these favorable financial assessments.

When asked about prospects for the year ahead, half of all American families expected their overall financial situation to remain the same, all things considered. Just 10 percent of all families in the first quarter 1987 survey expected their financial situation to worsen, a low level that has remained largely unchanged during the past three years. An improved financial situation was expected by 36 percent of all families in the first quarter 1987 survey, unchanged from the year-earlier reading.

The relatively flat profile of these personal financial evaluations during the past three years has been based on offsetting changes. Although as many families as last year expected income increases, the size of the expected increase has fallen. The falling income growth rates, however, have been offset by continued declines in the rate of inflation. By the start of 1987, though, the positive gap

INDEX OF CONSUMER SENTIMENT

February 1966 = 100



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

in growth rates had vanished, as families on average expected about the same rate of increase in their incomes as in prices (4%).

These financial prospects suggest a more cautious outlook by the consumer. As such, spending on large discretionary items will not be aided by the expectation of future income gains. Nonetheless, current financial prospects do not indicate planned spending cut-backs in the face of adversity. Stagnant income growth will constrain purchases and focus attention on the affordability of purchases. Price discounts and monthly repayment amounts will be of greater concern to consumers in making purchase decisions.

Expectations about the Economy

Consumers' assessments of the national economy have reflected the slowdown in growth as the expansion has lengthened. At the start of 1987, 45 percent of all families thought that the national economy had improved during the prior year, down from 52 percent at the start of 1986 and the peak of 71 percent in 1984. The outlook for the economy during the year ahead is for more of the same: the majority of all families in the first quarter 1987 survey (58 percent) expected the overall performance of the national economy to be similar to last year's. Fewer consumers expected significant change in either direction, with about as many consumers anticipating improvement as deterioration in the national economy during the year ahead (22 versus 20 percent)

That the economic expansion is expected to continue, however slow and halting, is viewed by the majority of consumers as meaning the continuation of good times financially in the country as a whole during the year ahead. To be sure, this assessment is not as favorable as earlier in the expansion, falling to 54 percent in the first quarter of 1987, from 59 percent one year earlier and 69 percent three years earlier. Nonetheless, even at its diminished level, more families expected favorable economic conditions at the start of 1987 than at the late-1970s peak.

The primary concern expressed by consumers about the continued weakness in the domestic economy involves prospects for employment. Half of all families in the first quarter 1987 survey expected the national unemployment rate to remain at its current level during the year ahead. On the margin, however, twice as many families expected increases in the national unemployment rate as expected declines (35 versus 14 percent).

Confidence in government economic policies to control inflation and unemployment sank to the lowest level recorded in nearly four years. In the first quarter 1987 survey, the proportion giving a favorable rating (22 percent) fell below the proportion giving an unfavorable rating (25 percent) for the first time since early 1983.

Although the majority did not expect the onset of a recession during the year ahead, half of all consumers did expect a recession within the next five years. Among all families in the first quarter 1987 survey, 50 percent expected bad times financially during the next five years, up from 44 percent one year earlier and 35 percent three years earlier. An uninterrupted expansion over the longer term was expected by only 34 percent of all families at the start of 1987.

Interest Rates and Buying Attitudes

Attitudes toward buying conditions remained favorable in the first quarter 1987 survey, although receding from the peak levels recorded last year. Favorable attitudes toward buying conditions for homes were held by 79 percent of all families in the first quarter 1987 survey, down from 81 percent at the close of 1986 and the all-time peak of 85 percent recorded in the spring of 1986. These very positive home-buying attitudes have been supported by favorable perceptions of prices as well as by declines in mortgage interest rates. The availability of good housing buys was reported by 21 percent of all families in the first quarter 1987 survey, down from 24 percent one quarter earlier. And although favorable references to current mortgage rates remain widespread, reported by 71 percent at the start of 1987, these favorable views of mortgage rates have declined steadily since the 82 percent peak in the second quarter of 1986.

Favorable attitudes toward buying conditions for vehicles were held by 61 percent of all families in the first quarter 1987 survey, down from 66 percent one quarter earlier and the all-time peak of 76 percent two quarters earlier. This decline was reflected in fewer references to the availability of discounted interest rates on new vehicle loans, falling to 39 percent in the first quarter 1987 survey from the peak of 59 percent recorded two quarters earlier. The availability of price discounts, in contrast, was mentioned by 26 percent of all families at the start of 1987, above the 1986 high of 24 percent.

Buying conditions for large household durables were viewed favorably by 72 percent of all families in the first quarter 1987 survey, not much below the all-time peak of 77 percent recorded in each of the first three quarter of 1986. The major reason given by consumers for these very positive attitudes has been the availability of price discounts, reported by 35 percent of all families; just 7 percent complained about high and rising prices for major household durables. References to reduced interest rates on purchases of household durables were made by 21 percent of all families in the first quarter 1987 survey, down from a peak of 30 percent in 1986.

Summary Outlook

Although consumer optimism has all but disappeared, consumer pessimism has not risen in its place. Rather, consumer confidence has been anchored by the expectation of little sustained change in either direction. Recent increases in the expected rate of inflation, coupled with smaller expected income increases, have led the majority of consumers to expect no net change in their financial situation during the year ahead. While this is a more cautious outlook, it is not negative, as very few consumers expect their financial situation to worsen. Consequently, while such personal financial assessments do not provide support for spending increases, neither do they provide the premise for sharp spending cutbacks. This does, however, focus consumer spending decisions on the affordability of purchases, given little expected growth in real incomes. And it focuses evaluations of buying conditions on the availability of discounts.

The prospective weaknesses are the past areas of strength: inflation and interest rates. Significant increases in either of these areas would turn marginal improvements in real incomes into declines, and sour favorable buying attitudes. At issue is not whether, but how much, and for how long, these rates will increase. Currently, there is little evidence that consumers expect a sustained resurgence in inflation and interest rates such as occurred during the past. Wage demands are thus likely to respond more slowly to rising price expectations, and rising market prices are more likely to be resisted rather than validated by stepped-up purchases. The responses of the consumer sector are thus likely to limit the ability of moderately rising rates to generate and reinforce a sustained period of increases. Small increases of limited duration in interest and inflation rates will be countered by shifting the timing of purchases, rather than abandoning purchase plans in the expectation of a recession. This is a reaction that allows sellers to use purchase incentive programs to reduce the variations in sales due to short-term changes in rates. And consumers' willingness to wait for discounts has only increased as the expansion has lengthened, and their stocks of goods as well as of debts have increased.

June 1987

Alternative Schools for Troublesome Secondary Students[1]

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The research summarized here is a longitudinal study of the effectiveness of certain alternative secondary schools in improving the behavior of delinquent and disruptive students. The three alternative schools studied were selected by theoretical criteria because this research was intended not only to assess the schools' effectiveness but also to test a theory which identifies adverse scholastic experiences as a major cause of delinquency.[2]

Our theory made us especially interested in some innovative programs with which some school systems are addressing the problem of delinquent and disruptive behavior. These programs go under the generic name of *alternative schools*. Such schools have been created for the gifted as well as the poor student, for the well-behaved as well as the disruptive. Some could be described as "permissive," others, as "strict"; some concentrate on basic scholastic skills while others pursue special talents and interests; and so on. About all that alternative schools have in common is that their programs are somehow different from the curriculum followed by the large majority of the community's students.

We were specifically interested in those alternative schools designed to serve students identified as behavior problems in their conventional schools. These problems include chronic truancy, disruptive behavior, and serious delinquency. Accurate figures are not available, but students of alternative education indicate that approximately a third of alternative programs are designed as responses to these problems. Within these limits, however, there is still a wide variety of approaches: disciplinarian; "back to basics"; detention; behavior modification; and others.

The alternative school programs we studied made special efforts (1) to provide their students, who had had histories of scholastic failure, with experiences of success, largely through individualized instruction and evaluation; and (2) to provide social support from warm, accepting teachers. The idea is that scholastic success and social support would raise the students' self-esteem and strengthen the social bonds that integrate students with their schools. Thus, the provocation to be delinquent would be reduced, the social constraints against delinquency would be strengthened, and consequently disruptive and delinquent behavior would decline.

The Students and the Alternative Programs

The students in the study were on the average quite heavily delinquent. Their self-reported delinquent behavior was markedly more frequent and serious than the national average found in the *National Surveys of Youth* around 1970. The students also had histories of poor performance and disruptive behavior at school. About half of those who attended the alternative schools were sent there by school officials and the other half volunteered, although poor school grades and high levels of self-reported delinquent behavior were similar among the referrals and the volunteers.

The study included three alternative programs operated by two public school systems in mostly white, working- to middle-class suburban areas. The programs served 30-60 students at a time in buildings near the junior and senior high

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[1]This is adapted from an article with the same title which appeared in *The Urban Review*, Vol. 14, No. 4 (1982), pp. 305-316. References are included in that article. The three figures are taken from the authors' monograph, *Expelled to a Friendlier Place* (The University of Michigan Press, Ann Arbor: 1984), pp. 124-126. The editors appreciate the permission granted by Agathon Press, Inc., publisher of *The Urban Review*, and by The University of Michigan Press.

[2]The theory that guided this research assumes that the student role is central and critical for American adolescents. Therefore, failure in this role constitutes a substantial threat to adolescents' self-esteem. Derogated self-esteem is psychologically aversive and provokes efforts to counteract it. Delinquent behavior is one such defensive response that is particularly well-suited to this purpose. Delinquent behavior, especially disruptive behavior at school, can be an effective defense for several reasons. First, since a major provocation is failure at school, then disrupting school is a counter-attack on the threatening institution. Second, assuming that delinquent and disruptive behavior is a self-aggrandizing performance, its worth is enhanced by the appreciative peer audience often available at school. Third, delinquent and disruptive behavior at school conveys a declaration of rebellion against the standards of success set by the schools.

schools which the students would ordinarily have attended. The curricula and procedures were more informal than the conventional schools': there were many fewer rules, and the administrators and teachers were more tolerant and flexible than faculty in conventional schools ordinarily are or can be. Teacher/student ratios were higher than is usually the case in secondary schools. Instances of disruptive behavior in the alternative schools were rare.

Two of the alternative programs, Alpha and Beta, featured independent study/learning contracts. The students in each also met daily as a group for one and a half to two hours for training in human relations and communication skills. The third program, Ace, offered a more conventional school curriculum and schedule, except that Ace was smaller, more individualized, more flexible, and warmer and more personal than a conventional program.

Study Design

Students attending the alternative schools were compared with students at the conventional schools from which they came. The comparison group consisted largely of students who were named by counselors and vice-principals as students also appropriate for alternative school referral. The alternative and conventional students were interviewed once early in the school year, as alternative students entered their programs, again at the end of the school year, and a third time in the following fall.

Of the 240 students initially identified as suitable participants in the study, 100 were alternative school students and 140 were students in the comparison group who attended only the conventional school. We interviewed 83 percent of the alternative school students and 69 percent of the comparison group in the first wave. In the third wave, we interviewed 72 percent of the originally identified alternative students and 64 percent of the conventional students.

The alternative and conventional students were quite similar when the study began. There were about the same proportions of boys and girls in each group; the grade point averages of the students in the two groups were equally poor; personal adjustment, assessed by psychological indexes of self-esteem, anxiety, and depression, was about the same in both groups; both groups had equally negative attitudes toward school generally and equally small commitment to the role of student; and their disruptive and delinquent behavior was at about the same high level, as indicated by the schools' records of disciplinary action and by the students' own reports of their behavior in school and in the community. The alternative students and the conventional comparison group also differed to a statistically significant degree in some respects: the alternative students were somewhat younger, they were more negative about their conventional school teachers, more pessimistic about their chances of succeeding at school, and felt more stigmatized as "bad kids."

Measurement and Data Analysis

A key variable in this study is, of course, whether students attended an alternative school or not. (Many alternative school students took some conventional school courses concurrently.) But since we are also interested in the social psychological processes by which the alternative programs intended to improve the students' performance and behavior, we constructed measures of these mediating processes as well. One is an index of students' perceptions of the flexibility and fairness of their schools' policies and rules. Another is the students' assessment of their academic prospects—their beliefs in their chances of being successful students, together with their feelings of being stigmatized if they attended an alternative school. A third mediating variable is respondents' assessments of how well they were currently performing in the student role—including their most recent course grades, their reports of the effort they were devoting to schoolwork, and their satisfaction with their performance. Fourth, we measured students' global attitude toward school, including participation in school activities and relationships with teachers.

Finally among the mediating variables, we measured students' self-esteem at both conscious and unconscious levels. We wanted to test the idea that a primary function of delinquent behavior is to defend poor students from feelings of low esteem. We hypothesized that, as a psychological defense, delinquent behavior raises adolescents' *conscious* self-esteem but *not* their *unconscious* self-esteem. The latter would remain low until experiences such as scholastic success make defensive delinquency unnecessary. Our own prior research had shown that the more delinquent adolescent boys gave evidence of high conscious and low unconscious self-esteem. Other research has demonstrated that youth with low conscious self-esteem will subsequently commit more delinquent acts than youth with higher self-esteem and that conscious self-esteem will rise as a result.

Disruptive and delinquent behavior in school and in the community was measured by the confidential reports of the students themselves, a widely used technique that has proved to be more sensitive and valid than official school, police, and court records.

All of these variables were measured among both alternative and conventional school students. Measures of change over the course of the study were also created, using a procedure—regression analysis—that corrects for unequal baseline levels.

Our basic strategy was to compare students who had had alternative school experience with those who were in conventional schools. Comparisons were made of the two groups each taken as a whole and for each of the three programs. We asked whether alternative school experience made a difference in the mediating processes and in delinquent and disruptive behavior at the third time period, by which time most of the alternative school students had returned to the conventional schools. We also explored whether the alternative schools affected different kinds of students differently.

Findings

The delinquent and disruptive behavior of both the alternative and conventional school students declined over the course of the study, probably reflecting in part a combination of statistical artifact ("regression to the mean") and actual improvement accompanying maturation. However, almost all of the social psychological processes that were hypothesized to make a difference in the misbehavior of youth indeed predicted to significant improvement. The alternative schools were more effective in putting these processes in motion.

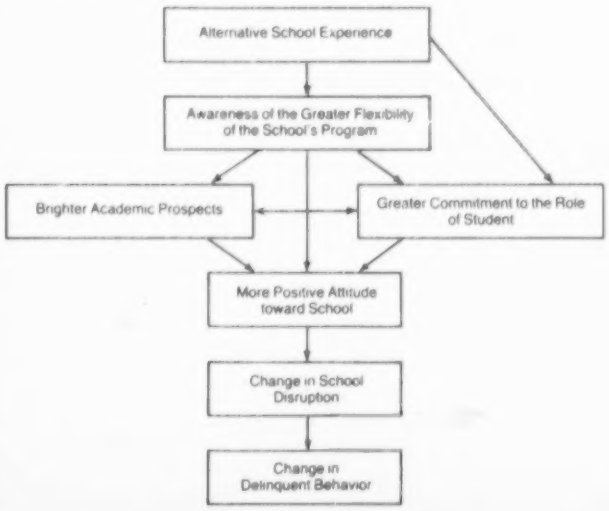
We found that the effectiveness of the alternative school programs differed between the kinds of students in their classes. The alternative schools made a significant difference in the behavior of their most *buoyant* students, but they had a negligible effect on the more *beset* students.

The "beset" students in this study were identified as those alternative and conventional students who exhibited relatively high levels of anxiety and depression during our first interview with them. They reported to us more than the average frequency of somatic symptoms of anxiety such as headaches and upset stomachs; they said they felt tense and nervous; they said that they more often "feel depressed." The beset students were those who scored in the top third of a scale composed of these indicators. We called the other two-thirds of the students "buoyant." The alternative and conventional school groups in this study each had about the same proportion of beset students. Beset students tended to be somewhat more delinquent than the buoyant students.

The beset alternative students did not respond as positively to the programs as the buoyant students did. Chart 1 presents the processes by which the alternative schools had a significantly more positive effect on the disruptive behavior of their buoyant students even after these students returned to the conventional schools. At critical points in these processes, the beset students responded differently.

Both buoyant and beset alternative students reported that their schools were more flexible and their rules more fair compared with the conventional students' descriptions of their schools. Clearly the two kinds of programs were perceived differently by their students. All students who rated their school as more flexible and fair tended to believe their own academic prospects were better than other students did. But the effect of greater flexibility in the alternative programs persisted *only* among their buoyant students after they returned to the conventional schools. By the third interview, the beset former alternative students were no more optimistic than the beset conventional students. Similarly, the perception of the flexibility of school rules was related to our respondents' commitment to the role of student. Since the alternative schools were seen as being more flexible, they fostered greater commitment to the student role, but only among the alternative schools' buoyant students, who then remained more committed through the third interview. The beset alternative students as a group never exceeded their conventional counterparts in commitment to studenthood, despite their recognition of the alternative schools' greater flexibility.

CHART 1. Model of the Social-psychological Process of Change—Disruptive and Delinquent Behavior


Alternative School Experience
Awareness of the Greater Flexibility of the School's Program
Brighter Academic Prospects
Greater Commitment to the Role of Student
More Positive Attitude toward School
Change in School Disruption
Change in Delinquent Behavior

In general, brighter academic prospects and greater commitment to being students were reflected in better global attitudes towards school among alternative and conventional students. And again, since the alternative school students became more optimistic and committed, their attitudes toward school were better. This remained true of the buoyant alternative students even after they returned to the conventional schools, but not of the beset students. Improved attitudes toward school were related to a greater decline in delinquent and disruptive behavior in school. Consequently, by the third interview the buoyant former alternative students were behaving markedly better in school than their conventional counterparts according to students' own reports of their behavior and to ratings by their teachers. They were also earning higher grades. This was not true of the beset former alternative students (see Charts 2 and 3).

Declining misbehavior in school was related to declining delinquency in the community. But, while this relationship was strong, it was of course not perfect. Neither the buoyant nor the beset former alternative students reported that they were less delinquent at the third interview than the conventional students did.

We can draw only highly tentative conclusions from comparing the three alternative programs because the number of students in any one program was small. Few of the differences between the alternative and conventional schools were statistically reliable, but their tendencies generally paralleled the findings for the three programs taken together: the school grades of buoyant former alternative school students were higher than those of the conventional students, their disruptive behavior was lower, and delinquent behavior was slightly higher; the differences among the beset students were not as great or as consistent in direction.

Insofar as the comparisons among the three alternative programs can be trusted, it seems that the Alpha program had the most marked effects—positive and negative—on its students' grades and disruptive behavior in school. Alpha's buoyant students seemed most improved at the third interview, and its beset students appeared to deteriorate most relative to their respective comparison groups. This impression of Alpha's impact is reinforced by the fact that the separate components of the change process (diagrammed in Chart 1) seem more tightly linked at Alpha than at Beta or Ace. Alpha's relative success seems attributable to its greater effectiveness in increasing its buoyant students' commitment to the role of student. Greater commitment persisted more reliably into the conventional school year than positive global attitudes toward school, on which the effects of Beta and Ace depended more heavily. At the same time, Alpha's beset students did not become more committed to the student role, just as Beta's or Ace's beset students did not. But since Alpha's effectiveness depended so heavily on commitment, its beset students fared worst. Alpha probably achieved the greater commitment of its buoyant students through the greater emotional intensity of its program, which, of the three programs we observed, most closely resembled group therapy. But the intensity of introspection encouraged by Alpha's method may have worked to the disadvantage of the beset students, who were at the outset quite anxious and depressed.

One of the potentially negative aspects of an alternative school experience is stigmatization. Youth may be made to feel that they are different in a derogatory sense by having

CHART 2. Changes in Disruptive Behavior at School for *Buoyant* Alternative (n = 29) and Conventional (n = 31) School Students

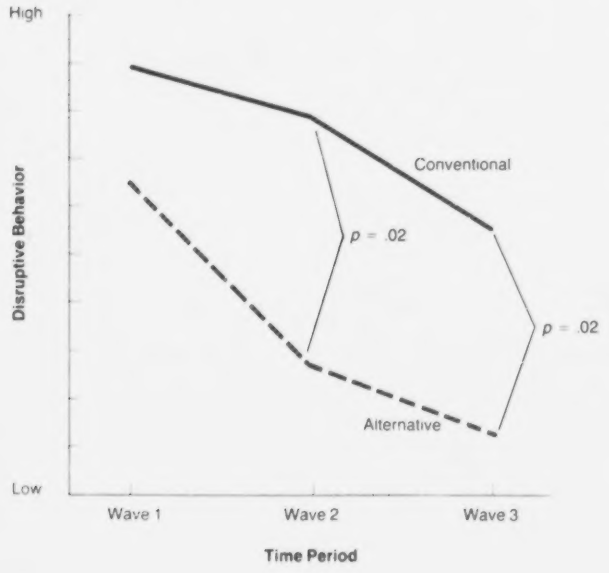
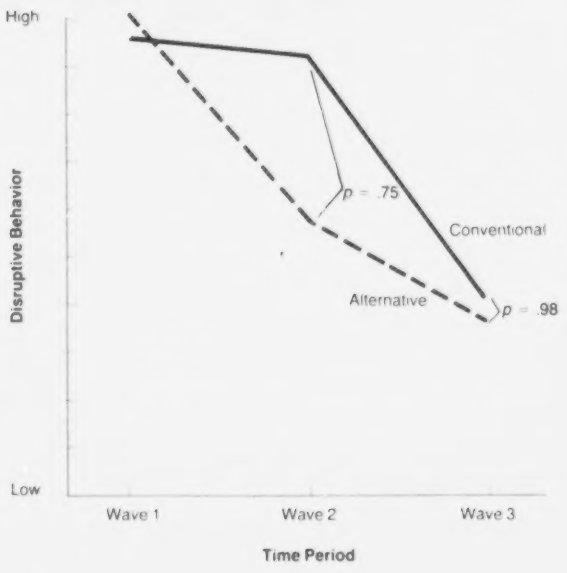


CHART 3. Changes in Disruptive Behavior at School for *Beset* Alternative (n = 17) and Conventional (n = 12) School Students



been sent to a special school for "bad kids." A substantial number of administrators, teachers, and students did hold negative opinions about the alternative programs and the young people who went there. Many of the alternative students were aware of these attitudes and shared them at first. But by our third interview with them, the students who had had an alternative school experience were almost invariably positive about the school and their classmates. So few students at that point expressed feelings of stigmatization that it is impossible with our data to determine whether stigma hindered the alternative schools' efforts. We conclude that alternative schools can be effective even though they may be negatively regarded by the educators and students in the associated conventional schools.

It should be noted that the alternative schools were as much if not more successful with their more highly delinquent students. The positive effects of the alternative schools on their buoyant students was greater with those who had been more disruptive and delinquent when they first entered the programs. But the alternative schools had negligible effects on beset students regardless of their history of misbehavior. Clearly then the alternative schools' ineffectiveness with their beset students was not due to the beset students' higher level of delinquency.

The effects of the alternative schools were not mediated or conditioned by the level of delinquency of their students' friends. The schools had no discernible effect on changing their students' friends or the degree of their friends' delinquency. If anything, the alternative schools were more successful with those buoyant students who reported having more delinquent friends. We believe that this is actually a reflection of the schools being more effective with students who were more delinquent themselves (and who chose to hang around with more delinquent friends).

Nor did the effects of the alternative schools depend upon changing their students' relationships with their parents. None of our data indicate that the social psychological processes by which the alternative schools effected change among their buoyant students involved students' parents. While improving relationships between students and parents would probably improve most adolescents' behavior, it is not a necessary condition for the effectiveness of school programs.

Our theory of a particular kind of alternative school as a means for reducing disruptive and delinquent behavior posits that youngsters' self-esteem is a key variable. We found a general decline in students' conscious self-esteem over the course of this study, about equal among alternative and conventional students. Nevertheless, improvement in the behavior and performance of the buoyant alternative students occurred without discernible change in their unconscious self-esteem and in the face of a decline in their conscious self-esteem. Self-esteem proved not so crucial to the processes of change as we had expected it to be. In this respect, the theoretical model was not confirmed, a surprising finding in the light of previous research.

Discussion

The assertion that poor scholastic experiences are significant causes of delinquent and disruptive behavior, particularly at school, received substantial support in this study. As certain youngsters' assessments of their schools and of themselves as students became more positive, their scholastic performance and their behavior improved.

Given these findings, the question arises of whether school-based programs might better screen out manifestly depressed and anxious students because the programs are less likely to help them. Such screening would be advisable if anxiety and depression could be diagnosed accurately, but this is difficult under the best of circumstances, and few school systems have the resources to do it well. It seems wiser to us, therefore, to employ alternative school programs in the diagnostic process: if certain students' behavior does not improve despite their greater satisfaction with the alternative program, then

a search for other points of intervention might be made. It may be wise to permit beset students to remain in alternative schools for a longer period, perhaps even to graduate from them.

We also note that the positive effects of the alternative schools were narrow, bearing most clearly on students' behavior at school and not reliably on delinquent behavior in the community. Perhaps the effects were narrow because the mediating changes were limited to school-related optimism and commitment. It is possible that unless or until youngsters' scholastic experiences enhance self-esteem globally, they will not have a global effect on their misbehavior. We have assumed that performance at school is highly salient to adolescents in western culture, and that being good at it would enhance self-esteem globally. Perhaps we have over-estimated the breadth of its impact.

On the other hand, it may be that the timing of our final interview with the students, one term after they had returned to the conventional schools, did not allow sufficiently for youngsters' self-esteem to change. The students may not yet have been altogether convinced of their ability to make it through school, despite their greater optimism.

There is one ominous sign in our data on self-esteem: the conscious self-esteem of the buoyant students and of the beset alternative students had declined significantly from our first to our third interviews with them. If it is true that low conscious self-esteem provokes disruptive and delinquent behavior, then we can expect a resurgence of misbehavior in the future. Or, if for some reason delinquency proves to be an inadequate defense, then we can expect increased anxiety and depression.

Our findings relating to students' families and friends also have theoretical and practical implications. Change in the buoyant students' behavior and scholastic performance, we found, did not depend upon improved relationships with their parents or diminished delinquency among their friends. These data speak to the salience of scholastic experiences, which seem to have marked influence in their own right, whether as sources of provocation or of social control. It is likely that the salience of schooling is pervasive throughout western culture, but it is plausible that there are subcultural differences. School-based programs may not be so effective in these subcultures, independent of other influences like families and friends. For example, we are mindful that almost all the students in our study were white suburbanites. Would alternative programs like the ones we oberved work among black residents of the inner city? We think so, but, of course, they would have to be tried. We think so because there are sufficient data in hand to indicate that schooling is certainly no less salient for black adolescents and their parents and perhaps even more salient.

We are not surprised that the alternative schools had independent positive effects on the behavior of buoyant students, at least at school. After all, the thrust of adolescence in our culture is to become more autonomous from parents and more serious about schoolwork. While most adolescents are still closely bound in many ways to their parents, the familial ties of most heavily delinquent youngsters are weaker. Our data reflect this: the students' attitudes toward school were more closely related to their deliquency than were their relationships with their parents. A possible exception to this generalization is the beset students' relationships with their mothers, which seemed more closely related to their behavior. This is consistent with our observation that the alternative programs were not effective with beset students because school was not the main source of their problems.

At the same time that adolescents are becoming more independent of parental influence, they are becoming more involved with their friends and peers. One might expect therefore that the delinquent tendencies of students' friends would be important influences on the students' behavior. But having delinquent friends is more likely a consequence of needing support for one's own delinquent behavior than a cause of that behavior. Buoyant students' disruptive and delinquent behavior at school declined even while they were reporting no change in their friends' behavior. We expect that students whose improved performance and behavior persist will however eventually begin to select less delinquent friends.

The practical significance of our findings relating to students' parents and friends is that educators need not depend upon reaching disruptive students' parents or changing disruptive students' friendship patterns in order to reduce disruption in their schools. Alternative programs of the kind we have observed can be independently effective with their more buoyant students. But it may be important that someone intervene with the parents of the beset students who do not respond positively to an alternative school.

Of particular practical significance is our finding that students' perceptions of their alternative school being flexible is critical to positive change. Many of the concrete options for designing alternative programs may be selected on the basis of the general principle of enhancing flexibility. "Flexibility" in this instance means taking into account the individual students' needs, fears, abilities, and moods in conducting the daily business of education. We regard flexibility as another term for *interpersonality* or the absence of rigid role regulation of social interactions. It is manifested in part by a relative suspension of the conventional rules governing how teachers and students behave toward one another. Another manifestation is the alteration of planned activities to accommodate to the mood of the class as a whole.

For example, one option for an alternative program is to house it in a building separate from the conventional high school that the students would ordinarily attend. Our observation of the schools in this study suggests to us that being in separate buildings contributed a great deal to the flexibility of the programs. The more casual comings and goings of alternative students, the occasionally higher noise level, the regular availability of coffee and a place to smoke, and other deliberate informalities that created the ambience of the alternative programs probably could not have been tolerated in the midst of a conventional comprehensive secondary school. At the same time, the potential danger of stigmatization by the implication of isolation and quarantine did not materialize, according to our data. The proximity of the separate facilities to the conventional junior and senior high schools of course facilitated the attendance of students in selected classes and students' transitions back to the conventional schools.

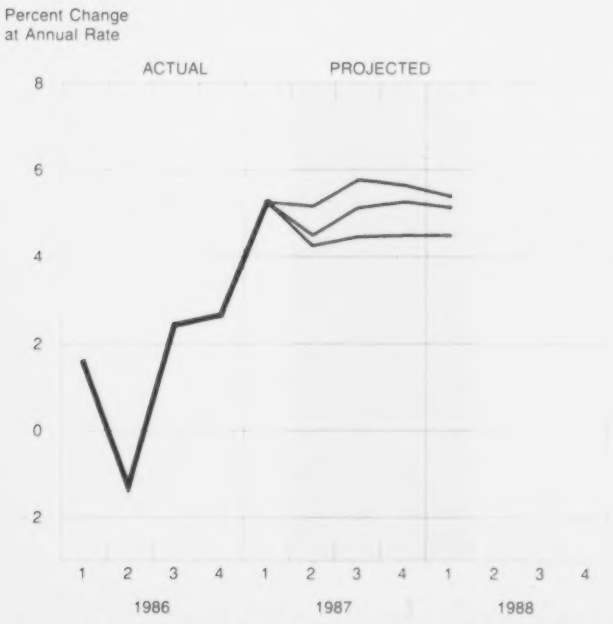
For another example: There seems to be a growing consensus among educators, despite the lack of any reliable data, that the principal is a major determinant of the level of disruptiveness in a school. Furthermore, the consensus seems to be that firm discipline and organization are the hallmarks of effective principals. Our data on the importance of perceived flexibility suggest, on the other hand, that disruptive students may not respond so well to the projection of such a principal's style onto the school program if discipline and organization mean inflexibility. Certain students may be

disruptive because they have chronic problems dealing with authority and because their frequent experiences of failure in school make any universal standards of behavior and performance threatening to them. If the principal is indeed a key element in minimizing school disruption, this study suggests that it is because his or her administration permits and encourages the staff to develop more interpersonal relationships even with the most disruptive students and to accommodate to their individuality.

We recognize that the desirable flexibility of alternative schools contains an element of unfairness. This unfairness, we think, is a major source of opposition to alternative schools among faculty and staff of conventional schools. Conventional school teachers quite rightly feel strongly their obligation to treat their students evenhandedly, which includes holding them equally to scholastic standards. But it is apparent that this principle is not followed in the kind of alternative school we observed in this study. So these alternative schools are open to the charge that their students earn scholastic credits with less effort, that they receive passing grades for below-standard work, and that they are privileged to break ordinary school rules. And this, it is pointed out, as a consequence of behaving intolerably badly! But we need to remember that the intolerable behavior was generated under conditions of fixed standards for performance and behavior, applied evenhandedly. These are conditions with which, for whatever reasons, disruptive students are developmentally unable to deal. It is arguable, nevertheless, that adolescents need to learn to deal with these conditions, for schools reflect the society they serve. And it is also arguable that, according to our data, temporary suspension of these conditions is efficacious for that learning to occur, at least by students who are not extremely anxious and depressed. Tailoring the level and pace of learning to the individual student's abilities and interests, and fostering interpersonal relations between teachers and students, contradict our conventional sense of fairness. Psychologically, however, the conditions of the alternative schools seemed to their students fairer than those of the conventional schools.

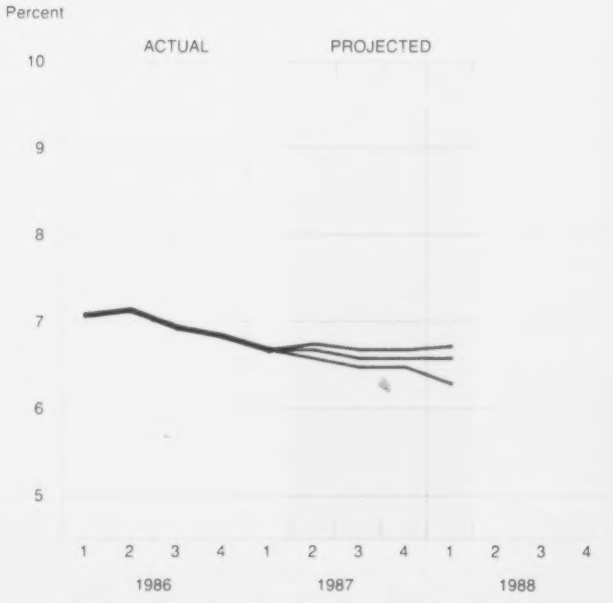
Producing statistically significant differences between "treatments" is only a tool of action-research, not its ultimate aim. The present findings also offer guidance to conventional secondary school administrators that will help to improve the educational process. While the constraints under which conventional junior and senior high schools operate – large size, low teacher/student ratios, pressures to evaluate students impersonally, etc. – make it impossible for them to adopt wholly the procedures of effective alternative schools, they may be able to alter their programs to a degree and on occasion to accommodate the needs of those students who are showing signs of failure, and the negative behaviors consequent to failure, so that many of them would not need to be sent to an alternative school. It appears that there is much to be gained generally from educational practices that impress students with their fairness and flexibility; from curricula whose level and pace meet students at their current level of academic adjustment and achievement; and from teaching styles that convey a sense of personal caring and support.

CONSUMER PRICE INDEX



Sources: Actual data are from U.S. Department of Commerce, projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

UNEMPLOYMENT RATE



Sources: Actual data are from U.S. Department of Commerce, projected data are from ASA-NBER Panel of Forecasters, revised when necessary to be consistent with latest actual data. The 3 lines display 3rd, 2nd (median), and 1st quartile values from the array of forecasts.

Actual and Projected Economic Indicators

seasonally adjusted

SERIES FORECAST BY THE ASA-NBER PANEL													
ECONOMIC INDICATOR	Quarterly Data										Annual Data		
	Actual					Projected					Actual	Projected	
	1986:1	1986:2	1986:3	1986:4	1987:1	1987:1	1987:2	1987:3	1987:4	1988:1	1986	1987	1988
GROSS NATIONAL PRODUCT	4,149.2	4,175.6	4,240.7	4,258.7	4,348.4	4,324.0	4,389.9	4,467.8	4,554.0	4,626.2	4,206.1	4,435.0	4,727.7
GNP IMPLICIT PRICE DEFLATOR (index, 1982 = 100)	113.5	114.0	115.0	115.2	116.4	116.1	117.1	118.1	119.3	120.4	114.4	117.6	122.0
CORPORATE PROFITS AFTER TAXES	126.9	128.8	135.9	144.5	136.6	142.0	144.1	148.8	155.0	153.0	134.0	147.9	158.0
UNEMPLOYMENT RATE (percent)	7.07	7.13	6.93	6.83	6.67	6.80	6.80	6.70	6.70	6.70	6.99	6.75	6.60
INDUSTRIAL PRODUCTION (index, 1977 = 100)	125.0	124.4	125.0	126.0	126.8	127.0	128.0	129.0	130.1	131.0	125.1	128.5	132.5
NEW PRIVATE HOUSING UNITS STARTED (millions)	1.938	1.878	1.758	1.702	1.801	1.700	1.720	1.701	1.710	1.720	1.819	1.710	1.725
CONSUMER PRICE INDEX (annualized percent change from prior quarter or year)*	1.60	-1.30	2.43	2.66	5.26	3.35	3.50	4.00	4.10	4.00	1.92	3.30	4.00
3-MONTH TREASURY BILL RATE (%)	6.89	6.13	5.53	5.34	5.53	5.48	5.37	5.55	5.70	5.98	5.97	5.60	6.10
NEW HIGH-GRADE CORPORATE BOND YIELD (percent)	9.68	9.06	9.14	9.05	NA	8.75	8.83	8.76	8.90	9.20	9.23	9.00	9.18
GNP IN 1982 DOLLARS	3,655.9	3,661.4	3,686.4	3,696.1	3,735.9	3,725.1	3,751.7	3,778.6	3,807.9	3,833.7	3,674.9	3,766.6	3,868.3
PERSONAL CONSUMPTION EXPENDITURES (1982 dollars)	2,372.7	2,408.4	2,448.0	2,445.8	2,438.9	2,452.5	2,466.0	2,483.1	2,499.0	2,516.1	2,418.7	2,471.5	2,537.0
NONRESIDENTIAL FIXED INVESTMENT (1982 dollars)	457.8	456.8	454.4	457.8	446.3	451.5	452.7	455.0	459.2	461.0	456.7	454.0	465.5
RESIDENTIAL FIXED INVESTMENT (1982 dollars)	186.3	192.7	197.2	199.7	197.5	198.7	199.2	199.0	198.8	199.5	194.0	198.8	200.5
CHANGE IN BUSINESS INVENTORIES (1982 dollars)	39.9	15.1	-0.3	-28.5	35.0	12.1	15.0	17.5	15.5	21.4	6.5	16.0	23.6
NET EXPORTS (1982 dollars)	-125.9	-153.9	-163.3	-148.0	-137.2	-143.1	-136.5	-128.0	-118.5	-120.0	-147.8	-132.4	-110.0
FEDERAL GOVERNMENT PURCHASES (1982 dollars)	320.4	328.9	330.9	348.6	331.0	346.4	345.9	346.0	353.2	346.0	332.2	347.0	348.0
STATE AND LOCAL GOVERNMENT PURCHASES (1982 dollars)	404.8	413.3	419.5	420.7	424.3	423.0	426.0	428.9	431.0	434.0	414.6	428.0	436.2

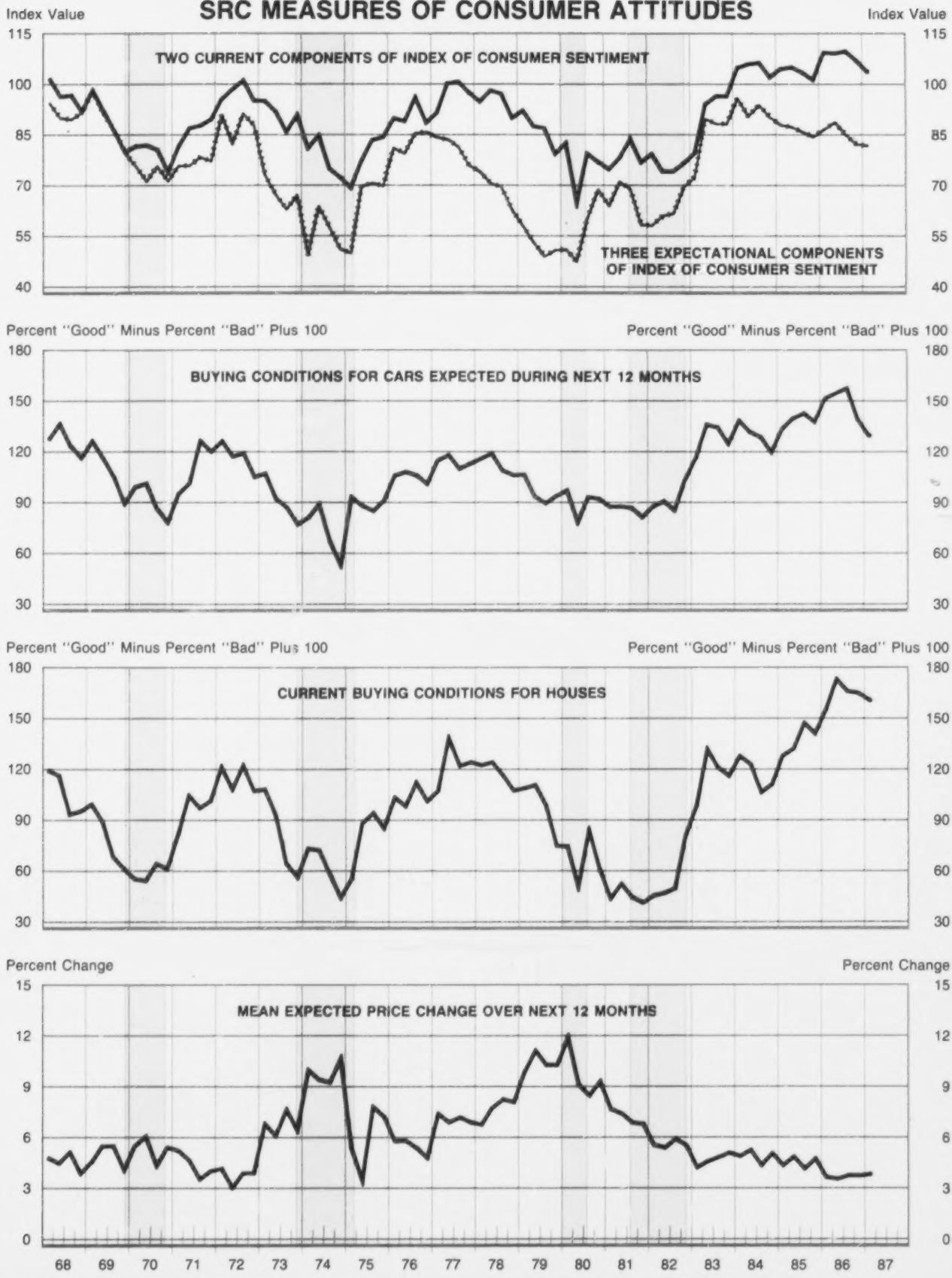
SERIES FROM THE CURRENT-DOLLAR GNP ACCOUNTS													
ECONOMIC INDICATOR	Quarterly Data										Annual Data		
	1984:4	1985:1	1985:2	1985:3	1985:4	1986:1	1986:2	1986:3	1986:4	1987:1	1984	1985	1986
GROSS NATIONAL PRODUCT	3,845.6	3,909.3	3,965.0	4,030.5	4,087.7	4,149.2	4,175.6	4,240.7	4,258.7	4,348.4	3,765.0	3,998.1	4,206.1
PERSONAL CONSUMPTION EXPENDITURES	2,487.2	2,530.9	2,576.0	2,627.1	2,667.9	2,697.9	2,732.0	2,799.8	2,820.4	2,850.7	2,428.2	2,600.5	2,762.5
GROSS PRIVATE DOMESTIC INVESTMENT	661.1	650.6	667.1	657.4	669.5	708.3	687.3	675.8	663.2	718.1	662.1	661.1	683.6
NET EXPORTS	-66.1	-49.4	-77.1	-83.7	-105.3	-93.7	-104.5	-108.9	-110.2	-111.9	-58.7	-78.9	-104.3
GOVERNMENT PURCHASES	763.4	777.3	799.0	829.7	855.6	836.7	860.8	874.0	885.3	891.4	733.4	815.4	864.2
DISPOSABLE PERSONAL INCOME	2,729.6	2,755.4	2842.3	2,832.0	2,882.2	2,935.1	2,978.5	2,979.9	2,993.0	3,053.1	2,670.6	2,828.0	2,971.6
PERSONAL SAVING RATE (percent of disposable income)	6.0	5.2	6.5	4.2	4.4	5.0	5.1	2.8	2.5	3.4	6.3	5.1	3.9

Note: (1) All data are at annual rates and in billions of current dollars unless otherwise indicated. (2) To facilitate comparison and evaluation of forecasts, both actual data, released in late May, and projected data, released by ASA-NBER in March, are displayed for first quarter 1987.

Sources: Projections: American Statistical Association – National Bureau of Economic Research panel of forecasters.
Actual Data: U.S. Departments of Commerce and Labor, Board of Governors of the Federal Reserve System.

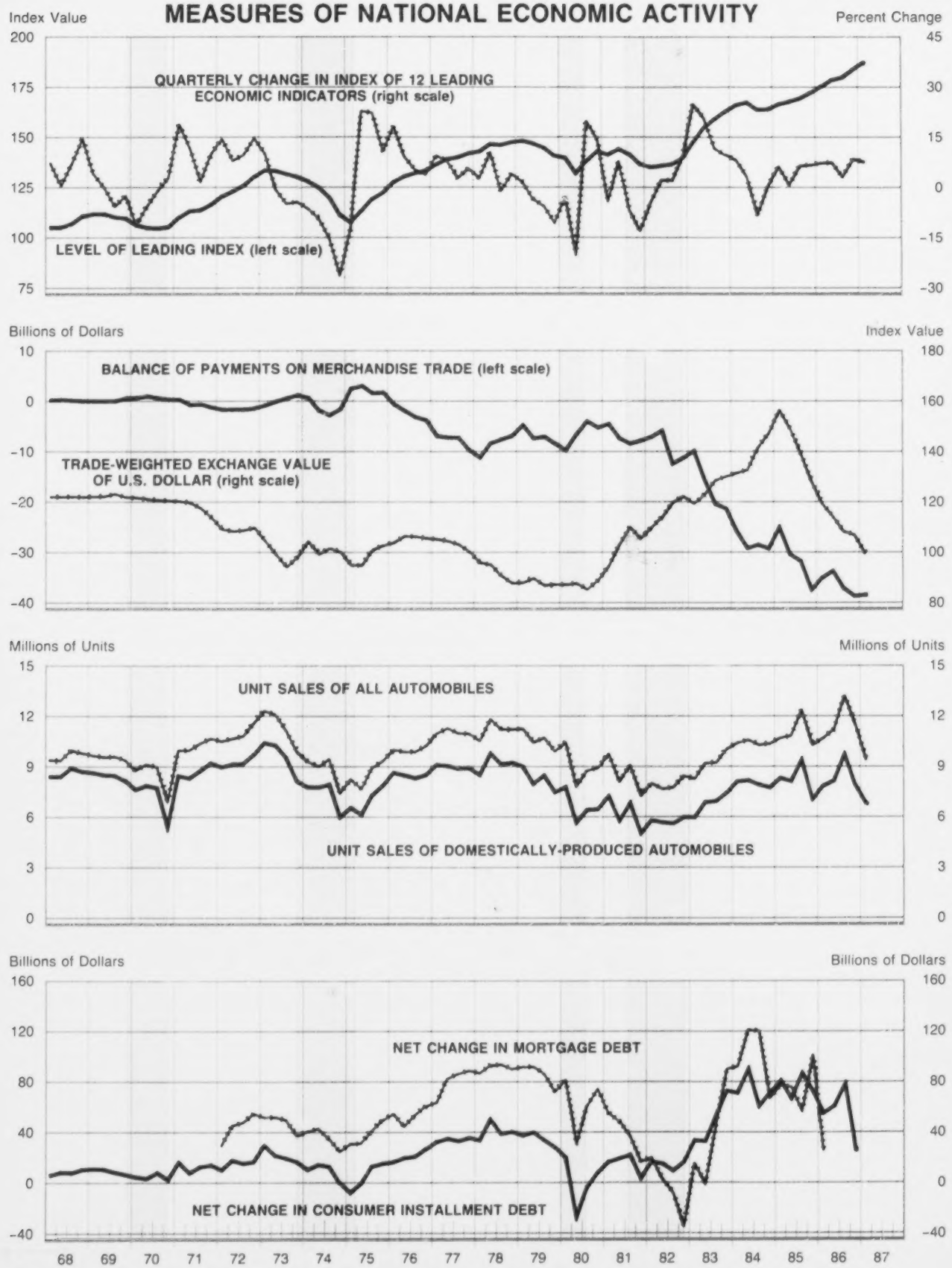
*Substantial revision of the data for series marked with an asterisk has occurred since the last printing.

SRC MEASURES OF CONSUMER ATTITUDES



Note: Shaded areas indicate recession periods as designated by the National Bureau of Economic Research, Inc.

MEASURES OF NATIONAL ECONOMIC ACTIVITY



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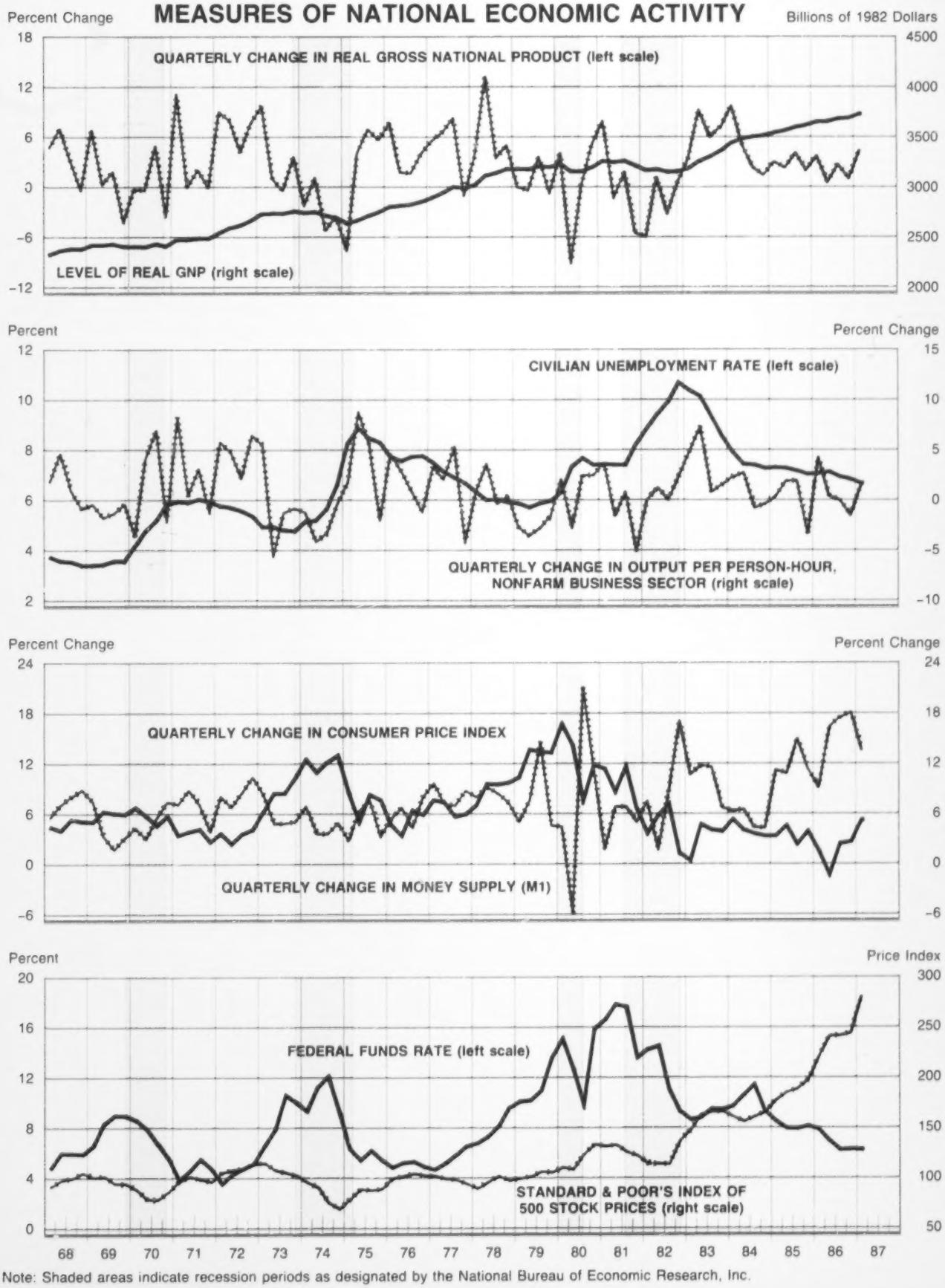
MEASURES OF NATIONAL ECONOMIC ACTIVITY



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